MODERN PACKAGING



A NOVELTY YESTERDAY A NECESSITY TODAY

The growth of the folding box industry, the manufacture of cartons and containers, is one of the wonderful features of American industrial expansion.

The memory of middle aged men goes back to the time when this cleanly and convenient form of packaging was practically unknown.

Last year the use of cartons in this country reached the amazing total of more than

THIRTY BILLIONS

In our plant alone it requires paper makers, artists, engravers, chemists, ink makers, multicolor printers, box fabricators, electricians, machinists, and many kinds of machinery almost human, to create these articles of every day use which have now become closely woven into the fabric of our every day life.

We have, in our model plant, hundreds of highly trained specialists working day and night with this great objective in view

QUALITY AND SERVICE.

FORT ORANGE PAPER COMPANY

Castleton on Hudson, N. Y.

New York

Boston

DED PACKAGING PAYS

THE outstanding preference enjoyed

by properly packaged food products indicates that present-day merchandising demands that more than ordinary attention be given to the wrapper.

Your product must be prepared to withstand varying climatic conditions as well as the strictest sanitation laws. In order to do this, the paper must be right.

No matter what your packaging problem may be, our fully equipped laboratory in the hands of experts is at your service. Let them find the wrapper best suited for your particular product.

VEGETABLE PARCH VEGETABLE PARC

MODERN PACKAGING

For the Service of those Industries where Packaging is a Factor

VOLUME 1

AUGUST, 1928

No. 12

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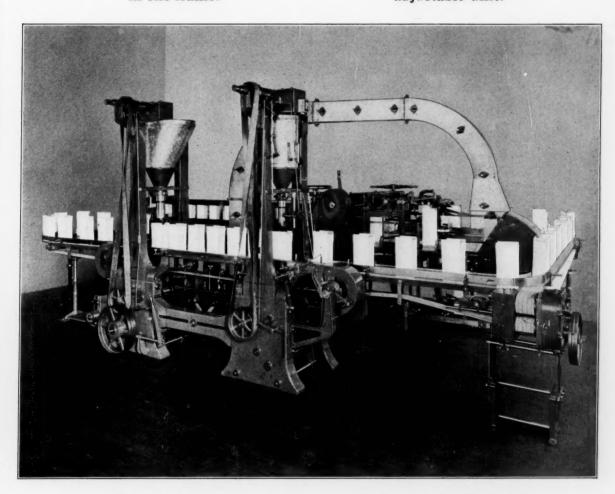
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YOU SAVE YOU INSURE

Initial Investment—Floor Space— **Mechanical Attention** by the purchase of this **Bottom and Top Sealer combined** in one frame.

tight, square cartons by the use of this standardized, interchangeable and adjustable unit.



YOU SAVE

materials and operating labor by the purchase of this Tandem Station fully automatic Gross Weigher.

YOU INSURE

clean packages and a practically dustless packing room by the use of these special deaerating auger feeders.

NATIONAL PACKAGING MACHINERY CO.

Manufacturers

181 GREEN STREET, JAMAICA PLAIN, BOSTON, MASS.

14 Railroads at Your Service

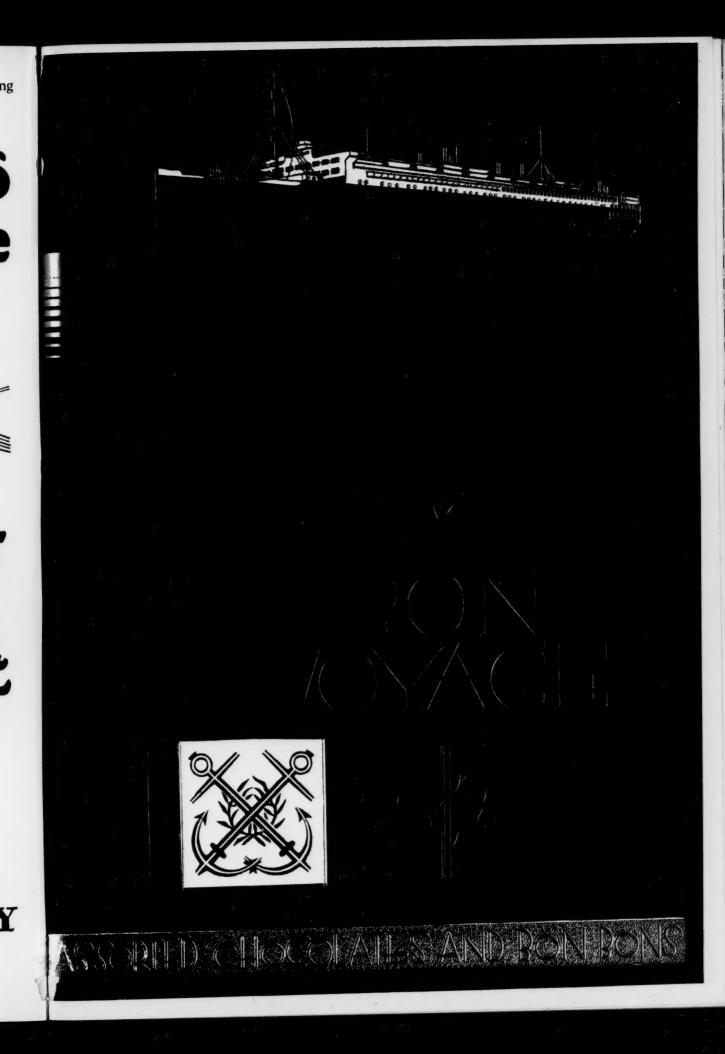


5 RAILROADS OUT OF MONROE and direct connections with OTHERS AT TOLEDO.



Prompt delivery of Folding Paper Boxes, Solid Fibre and Corrugated Shipping Cases, has played an important part in the growth of the Consolidated Paper Company from a capacity of 6 tons of paper per day to our present daily capacity of over 700 tons.

CONSOLIDATED PAPER COMPANY MONROE, MICHIGAN



CANDY BOX TOP SUGGESTION

In this issue, we feature a candy box top, showing the effectiveness of a box stamped with the

BRIGHTEN LEAF PROCESS

No other process can produce these same richgold effects.

Unusually attractive boxes reflect the quality of the product contained therein.

Let our art staff show you how much we can enhance your package and increase your sales.

This design as well as any of our other monthly features can be secured for your exclusive use.

THE H. GRIFFIN & SONS CO.

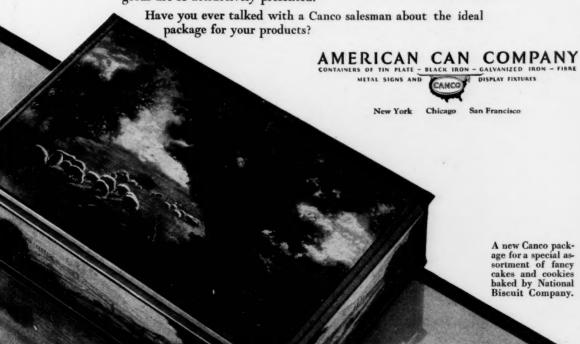
BRIGHTEN LEAF DIVISION
75-77 DUANE STREET, NEW YORK, N. Y.
CHICAGO BOSTON

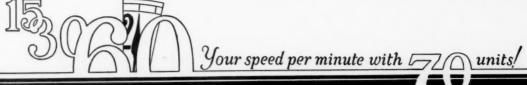
Prepared by Service Department MODERN PACKAGING



Canco metal packages do these things. They keep the contents in the same condition as when packed . . . they protect from harm by weather changes, by dirt or strange odors, and by careless handling.

The colorful charm of Canco lithography is sure to attract the customer's eye. A Canco decorated package gives strength to your brand by its individual beauty and usefulness, and because your goods are so attractively presented.

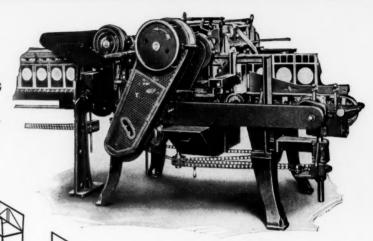




"PNEUMATIC" AUTOMATIC PACKAGING MACHINERY

HIGH SPEED TOP SEALING Machine*

*One of the Seventy.



A Secure,

THERE SHOULD be no delay between filling and top sealing. In the "Pneumatic" System the filled cartons pass directly to this High Speed Top Sealing Machine.

Sealing begins with the end flaps, which are pressed down to meet in the center. When a lining is used it is interleaved with the flap, a triangular fold against each side flap insuring the tightest possible seal.

This method insures a secure, clean seal right to the edge, without smear or stickiness. The machine is provided with drying belt delivery so that the packages emerge ready

Clean Top Seal every second!

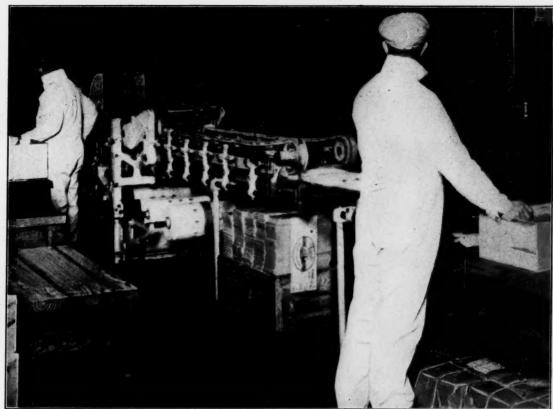
for tight or wax wrapping, or for packing in shipping cartons.

A Packaging System Survey without charge

Let us go over your present system, and consider your packaging problems. It may be that between us we can work out some improvements that will be mutually profitable. A call to us will bring immediate answer by letter, or call from our nearest branch office. Come to Headquarters!

PNEUMATIC SCALE CORP., Ltd., NORFOLK DOWNS, MASS.

U. S. A.



Courtesy of Atlantic Coast Fisheries Corporation

Where Nordic fillets are wrapped in Paterson Genuine Vegetable Parchment

PACKAGED fish! Packed, branded and sold like any other item of food! Yet, as fresh and appetizing to eat as when taken out of the ocean!

That is the amazing new development of the world's oldest industry. In the short space of seven years, branded fillets have become a regular item on the menu in millions of American homes.

And, since the very inception of this movement, Paterson Genuine Vegetable Parchment has played a helpful role in the vital problem of packaging. It is moisture proof, grease proof, odorless, and tasteless, and each package bears the brand mark of the packer, printed in brilliant fast-color inks. These unique qualities have made it the one wrapper that is used consistently today by so many producers and packers of moist foods.

Send us a unit of your product and we will gladly return it to you wrapped as we would suggest in Paterson Genuine Vegetable Parchment.

The Paterson Parchment Paper Company

Original Makers of Genuine Vegetable Parchment PASSAIC, NEW JERSEY

Chicago

San Francisco

Continuous Stream Weighing

IKE the constant flow of water over a fall, the No. 200 Automatic Continuous Stream Scale operates on the principle of non-interrupted flow.

This scale has two complete weighing units mounted within the cast iron frame. A supply chute placed centrally between the two units, moves automatically, and is so guided as to direct the continuous flow of material alternately from one scale hopper to the other.

Particularly designed to weigh quickly and accurately all free flowing granular powders, peppers and spices, directly into packages or bottles holding from one to twenty ounces at a speed of up to 45 per minute, the No. 200 will give you extraordinarily fine weights. The accuracy is such that 90% of the containers will be filled to balanced weights, the remainder containing no errors greater than 1/16th ounce.

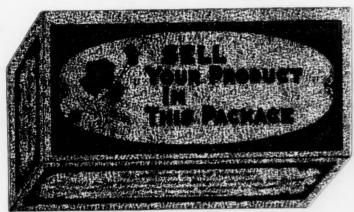
One of the most successful production measuring devices ever designed, this scale has met with instant favor in hundreds of installations. We would be glad to demonstrate it to you in actual operation.

AUTOMATIC WEIGHING MACHINE DIVISION,
AMERICAN MACHINE & FOUNDRY CO.

5502-5524 Second Ave. Brooklyn, N. Y.



AUTOMATIC MACHINERY



A paper-board container lined or surfaced with real metal

THE MASTER METAL CARTON

Here is a carton which combines in itself most of the advantages of metal and paper containers.

The Master Metal Carton consists of a thin sheet of bright-as-silver, flexible aluminum mounted on paper-board by a water-proof adhesive. The carton can be made with the metal surface either on the inside of the box or on the outside.

As a package which advertises itself the Master Metal Carton has no equal. The gleaming metal surface and bright color printing catch and hold attention. The cost—but little more than that of a paper carton.

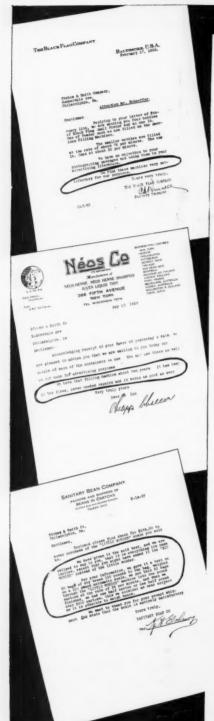
Write us for samples and prices.



A Mark of Quality

UNITED STATES FOIL COMPANY, INC.

Louisville . . Brooklyn . . San Francisco



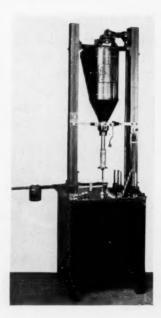
CONFIDENCE

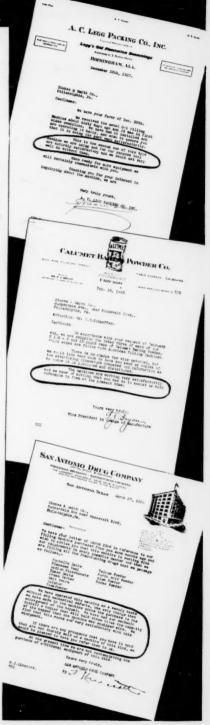
Confidence is a force that time alone can release. It is the backbone of every successful business.

The confidence placed in Stokes & Smith is reflected in the letters reproduced here. Ability to produce packaging machinery that meets every test—that gives supreme satisfaction—at low costs—has made for Stokes & Smith an enviable record.

The American Universal Electric Filling Machine fills a wide variety of materials into almost any type of container. It is automatic, accurate, dependable.

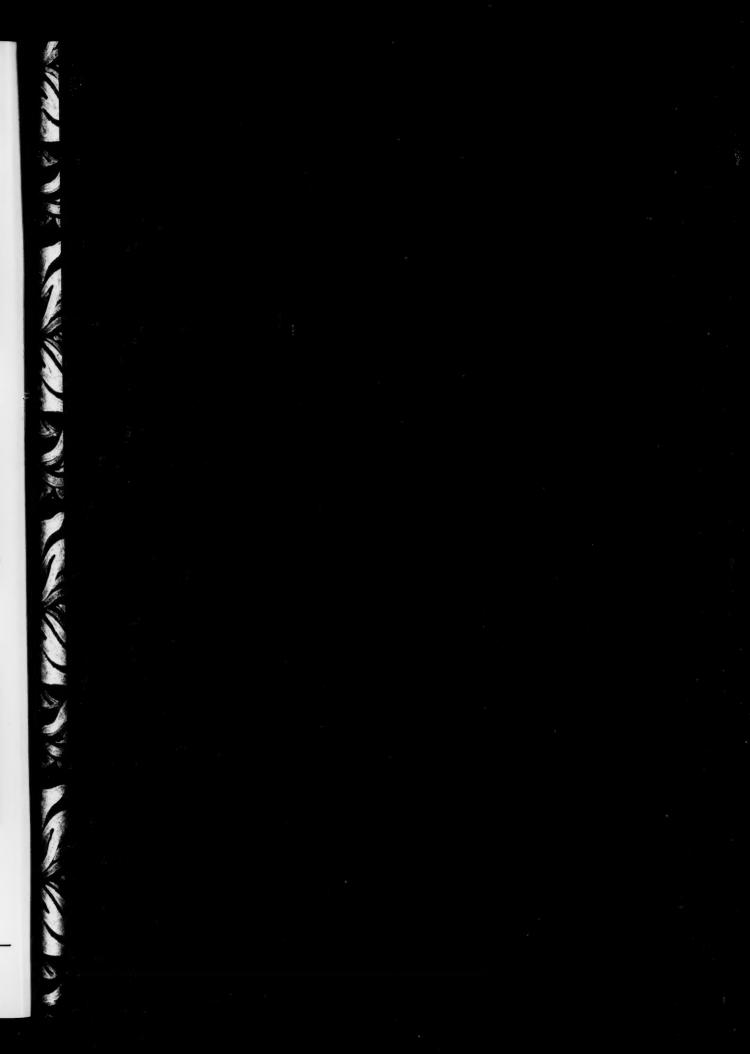
The Stokes & Smith line of packaging machinery is so complete that it will pay you to consult us on your problems.





STOKES & SMITH COMPANY PACKAGING MACHINERY

FRANKFORD, PHILADELPHIA, U.S.A.
LONDON OFFICE-23 GOSWELL RD.







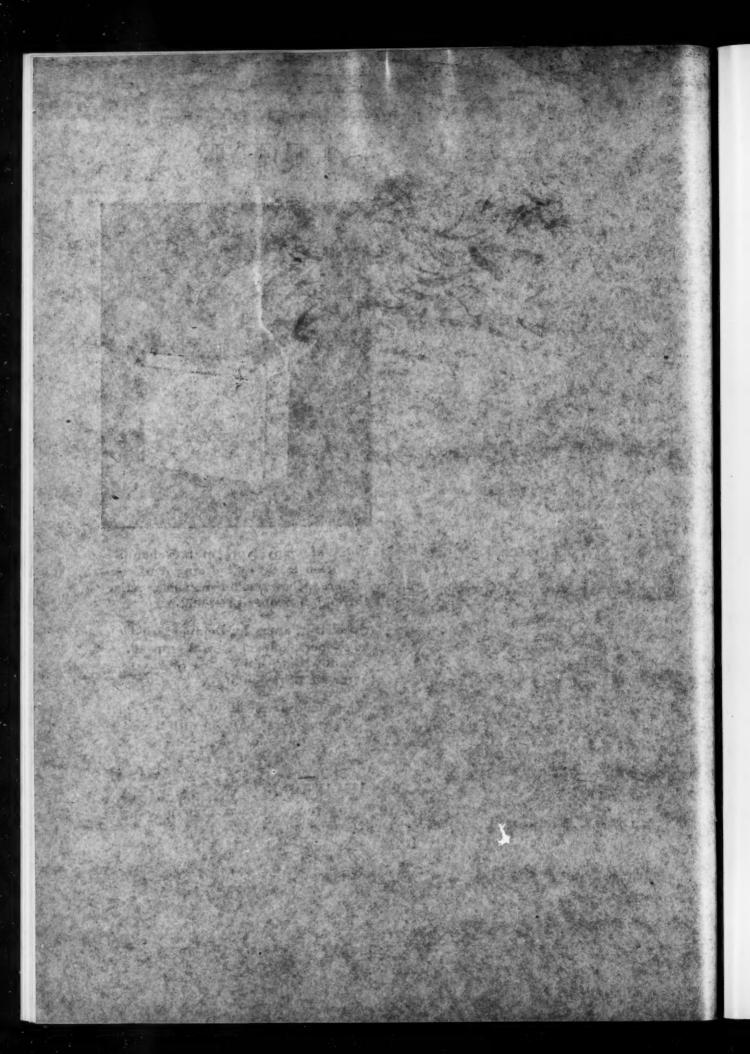
Sales of many types of merchandise are often made by the appeal of continues. All merchandise rains prestige through a proper presentation.

Specialty Papers by Bejonge, used on containers, impart a frank appeal an added saleability . . . to any type or grade of product.

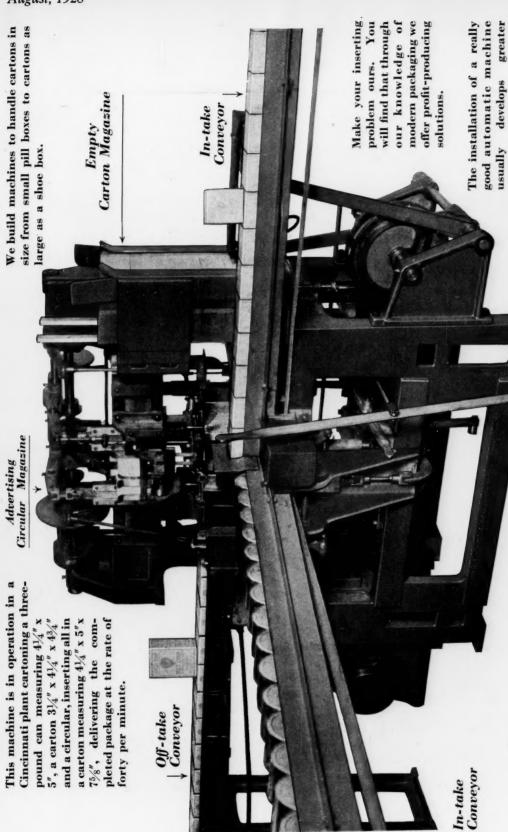
Write for Sample Book Number 218 which shows many heautiful and unique color combinations and patterns.

MEN YORK CHICAGO PHILADISTHIA



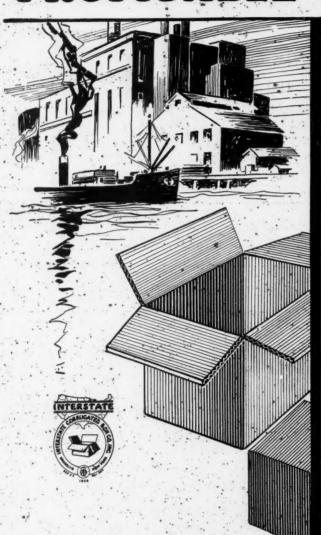


saving than anticipated.



R. A. JONES & COMPANY, INC., CINCINNATI, O. =

PROFITABLE PURCHASE



INTERSTATE CORRUGATED BOX COMPANY, INC.

> FACTORY AND GENERAL OFFICES FRONT AND MAIN STREETS BROOKLYN, NEW YORK

> > Branches:

BALTIMORE, MD.

PHILADELPHIA, PA.

Good-Will Economy Safety

Every day more and more Purchasing Agents are turning their attention to INTERSTATE CORRUGATED shipping boxes. This is evidenced by the fact that we were forced just recently to increase our plant facilities 66%. Why? Because INTERSTATE CORRUGATED is a three-fold profitable purchase. When you purchase INTERSTATE CONTAINERS you buy customer good-will, shipping economy and safety.

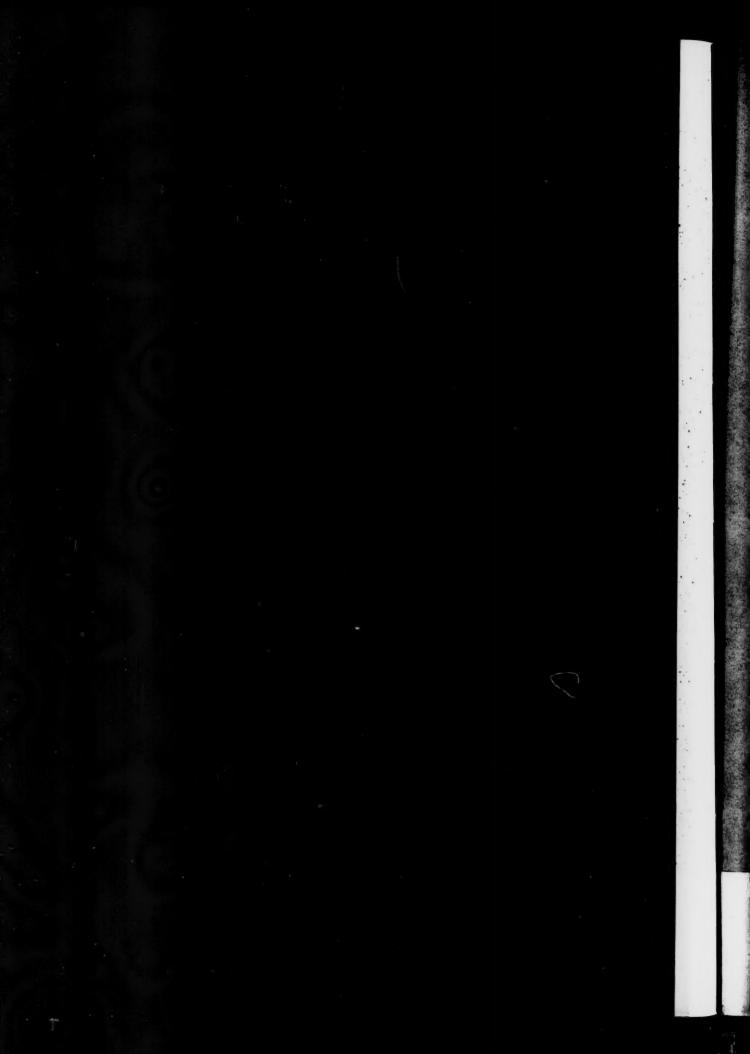
The two greatest elements in trade are quality of goods and excellence of service. Upon the setwo elements, that valuable asset a good-will is built. INTERSTATE CORRUGATED CONTAINERS are builders of GOOD-WILL, because they deliver merchandise in perfect condition. The cost is no greater than other boxes and the saving in ultimate shipping expense will astonish you.

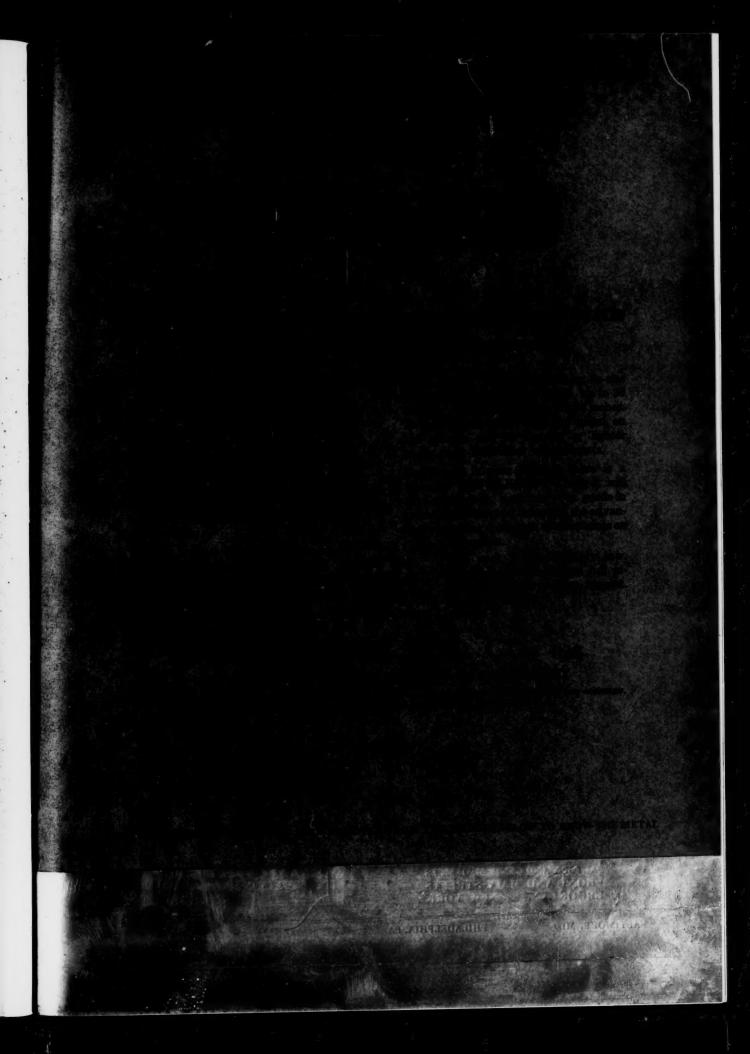
Our package engineers are ready to design an INTERSTATE CORRUGATED CONTAINER that will apply to your special needs. Tell us what your requirements are... today... and let us demonstrate to you this exceedingly profitable purchase.

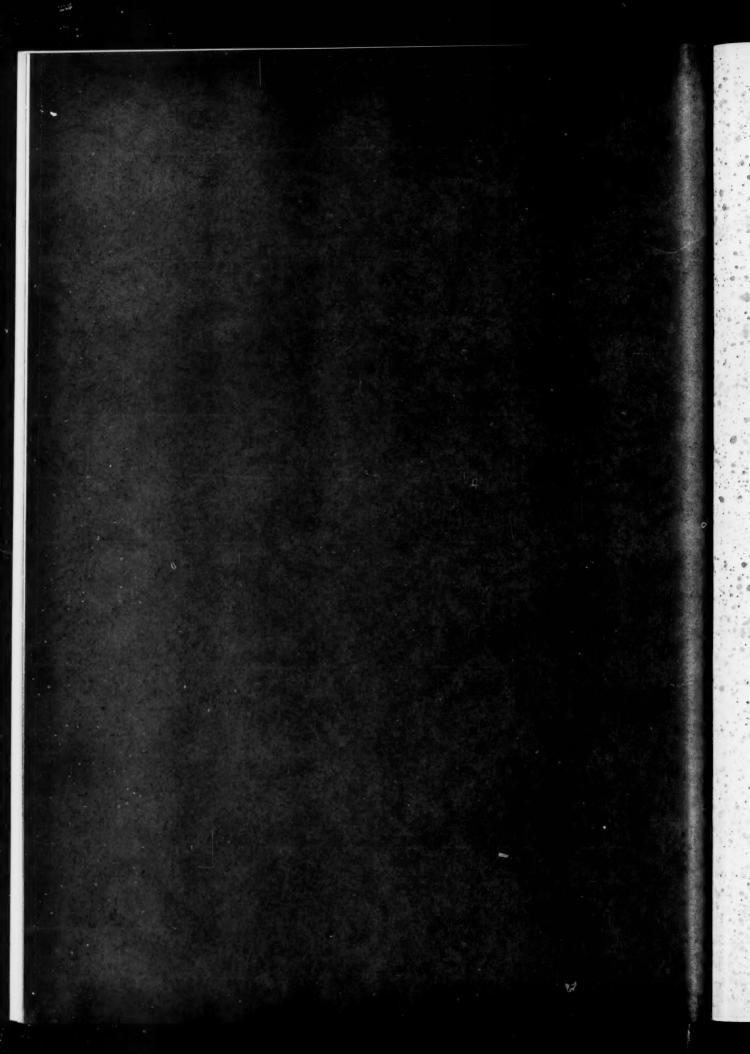
Your request for full particulars incurs no obligation... Write today:

INTERSTATE
A BUY-WORD FOR
SAFETY IN SHIPPING











One mechanical hand does the work of many human fingers

PROBABLY you are using all the standard machinery. common to your industry. Yet there are certain operations in there are certain operations in CAN DO IT your plant that are slowing up

your whole production process, or losing money through excessive spoilage and waste because they must be performed by hand.

A few years ago, in a case of this sort, all that a manufacturer could do was to grin and bear it. Today you can call in Special Production Machines, Inc., who will strengthen the weak spots in your production by designing machines to perform the operations now done by hand, or by perfecting and speeding up your present ma-

Special Production Machines, Inc., has already saved thousands of dollars for manufacturers in widely diversified lines. In a number of cases we

a machine

have cut down waste and improved the finished appearance of the product as well. Some of these manufacturers have employed us to help bring their own research to a successful conclusion. In al-

most every instance we have been able to help them in one way or another. If we build a special machine for you that improves production and reduces costs, the blue prints and patents of that machine become your property. Any improve-ments, any new methods installed by us are kept confidential. No other manufacturers can ever derive the benefits of our work in your plant.

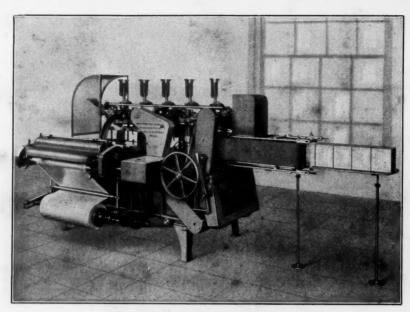
A booklet describing the services of Special Production Machines, how it operates and how it is serving manufacturers, will be sent on request. Special Production Machines, Inc., Norfolk Downs, Mass.

SPECIAL PRODUCTION MACHINES

A Division of

PNEUMATIC SCALE CORPORATION, LIMITED

For over thirty-five years Pneumatic Scale Corporation, Limited, has manufactured automatic labor-saving machinery for many of the world's largest producers of merchandise.



JOHNSON Automatic WAX WRAPPER

POINT 7 Fully Automatic in Operation— Labor Costs Practically Nil!

THE POINT

All Parts Made in Our Own Plant!

dern Design, and astantly Kept So!

me Day Shipment of our Parts Orders!

Speed with Accuracy, Safety and Efficiency!

Progressive Straight Line yet Flexible Packaging!

Fully Automatic in Operation-Labor Costs Practically Nil!

WHERE the JOHNSON Automatic WAX WRAPPER is used with either type of JOHNSON C. W with either type of JOHNSON Sealing Equipment no operator is required. Packages to be wax wrapped in this instance are delivered automatically directly from the dryer of the SEALER onto the intake conveyor of the WAX WRAPPER.

Should no sealing or filling equipment be in use, an attendant places the packages on the intake conveyor, after which operation the machine is entirely automatic in its action, deliver-ing the wrapped package to the packing table without further attention from the operator.

Since its wrapping speed is from 35 to 90 packages per minute (depending upon package size and weight) this very low labor cost per unit wrapped is easily absorbed.

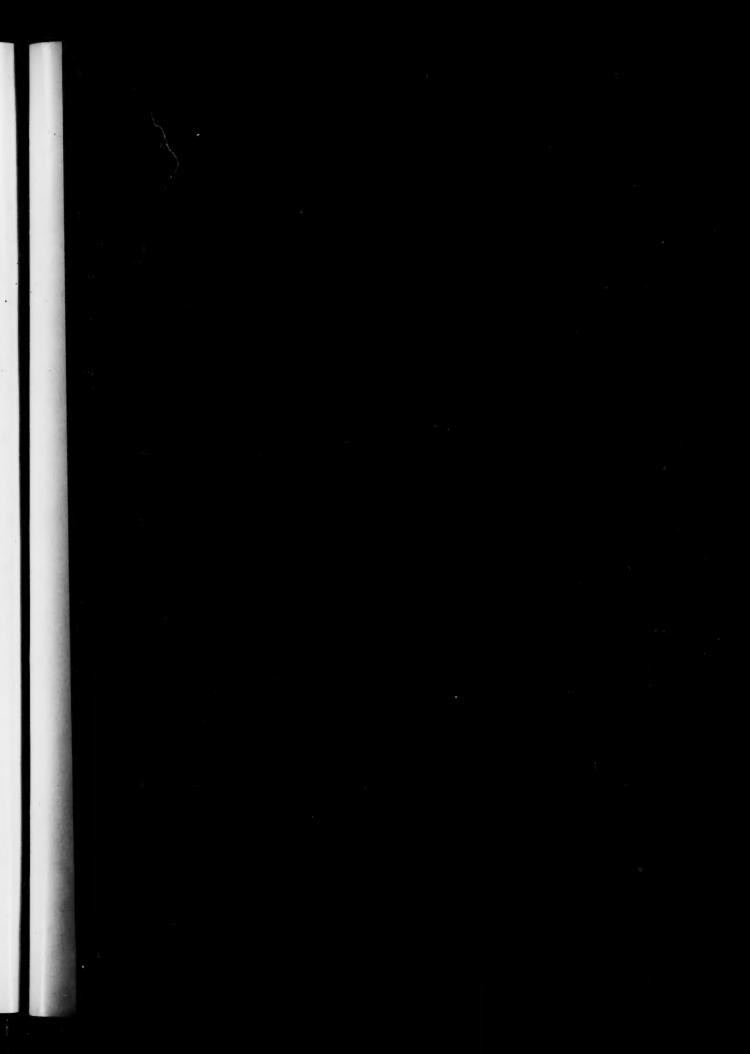
Write for descriptive circular. Specific plans and operating data to fit your particular need are gladly furnished without obligating you. We urge you to put your packaging problem up to us.

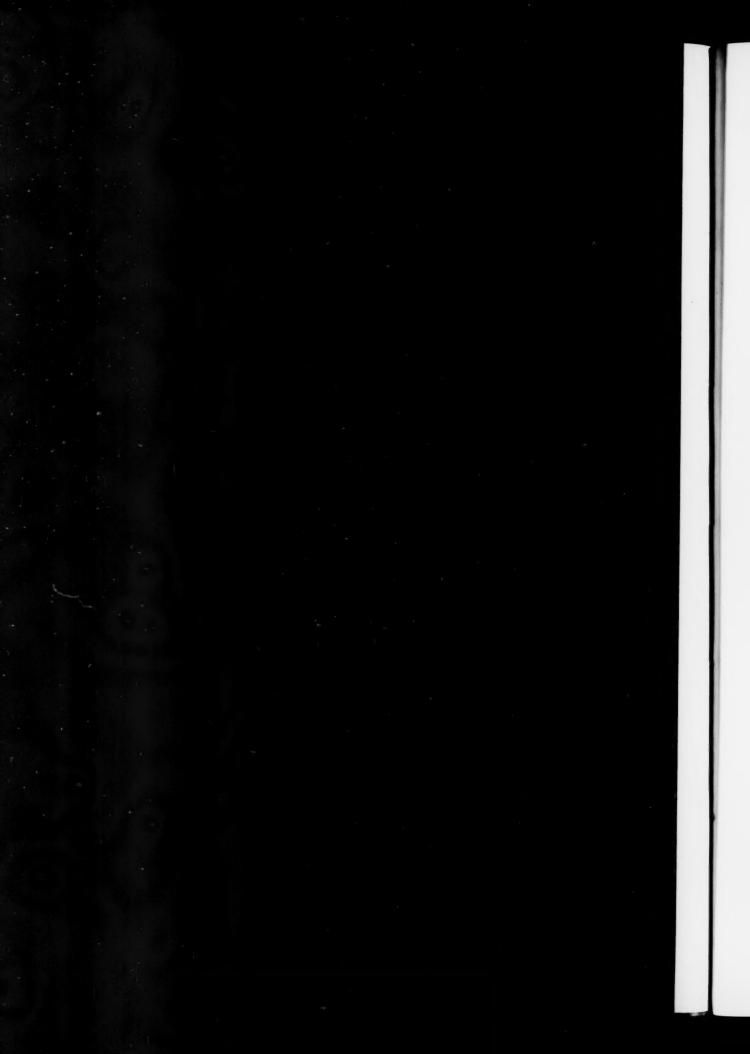
JOHNSON AUTOMATIC SEALER CO., Ltd.

Battle Creek, Mich., U. S. A.

30 Church St., New York City 228 No. La Salle St., Chicago, Ill.

Manufacturers of Complete Packaging Units—Net Weight Scales; Gross Weight Scales; Bottom and Top Weight Scales
Bottom and Top
Sealing and Lining
Machines (with or
without Automatic
Carton Feeders);
Wax Wrappers and
Glassine Wrappers.





WINDOW CARTONS



We are Specialists in Designing Cartons of any nature where Moisture Proofing, Grease Proofing or Both are Required. Let Us Solve Your Package Problems.

MORRIS PAPER MILLS

General Office, 111 West Washington St., Chicago, Ill.

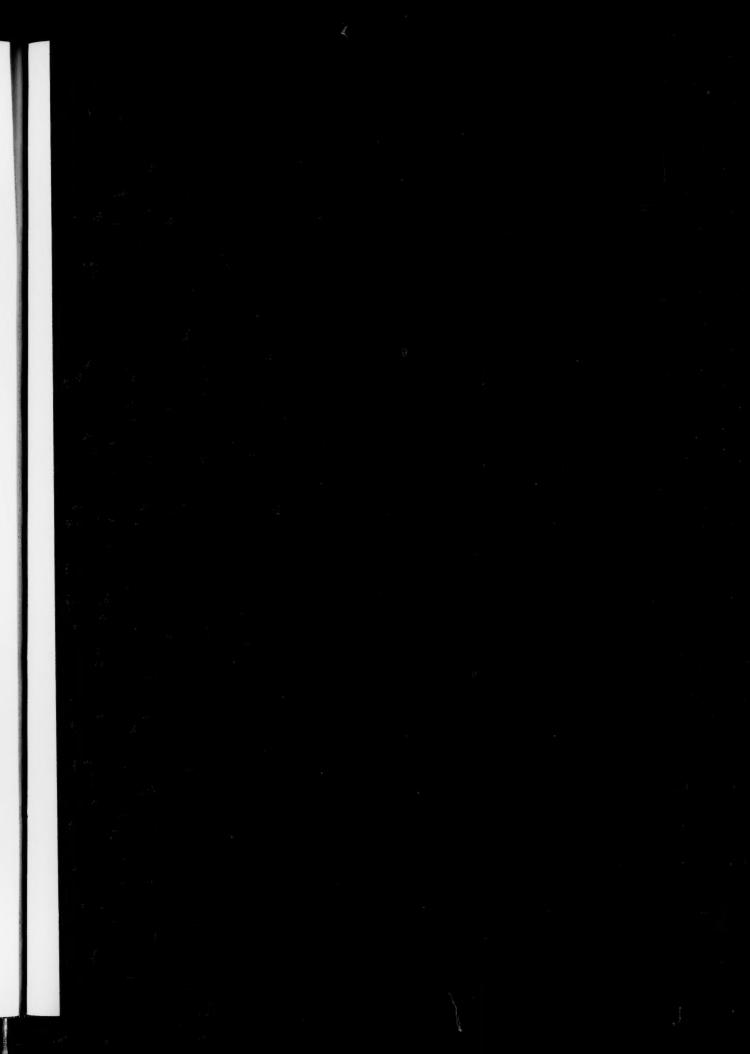
Phenix Cheese

Originated for the finest tables

Cheese Phenix Cheese Phenix Chee

> **A Combination Carrier and Tilted** Display Box - - Double Strength When Closed - A Glaring Display When Open - Its Simplicity Forces it to a Preferred Counter Position

General Offices, 111 West Washington St., Chicago, Ill. Eastern Office, 1217 Race St., Philadelphia, Pa.





Delicate Iced Cakes



Skinless Frankfurters

Tender Yeast Cakes





Cocoa and Bouillon Cubes

Is your product any more difficult to wrap than these?

THE economies and merchandising advantages ■ of machine-wrapping play a large part in the success of many products. The savings over handwrapping add substantially to the profits-and, what is more important, often enable a manufacturer to market his product at a more popular selling price, thus automatically increasing volume.

The improved appearance, and better protection obtained by modern machine-wrapping is another important sales stimulant.

Certainly, whenever possible, it is advisable to wrap by machine.

But the manufacturer often assumes that his product cannot be wrapped by machine-that, because of its physical form, hand-wrapping is necessary. Years ago this might have been so. But today, with the wide variety of machines that have been developed, the advantages of machine-production are available to many more products.

Often it is not even necessary to design a new machine. For example, the machine which now wraps iced cakes and cup cakes is an adaptation of a machine that wraps cartons of crackers or biscuits. The machine that wraps skinless frankfurters is a revised model of the machine that wraps stick candy. The machine that wraps cocoa-cubes—so delicate that the slightest pressure of the fingers would pulverize them-is the same machine, with slight modifications, that wraps tiny bouillon cubes.

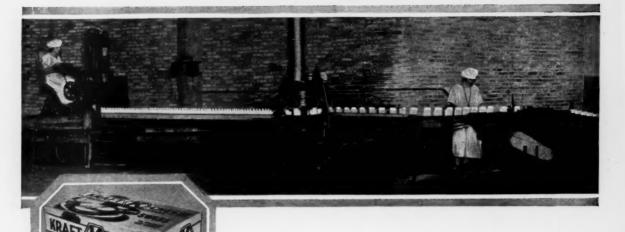
No matter how"different"your product may seem, bring it to us. With our 25 years' experience in providing machines for a wide variety of products, and the inventive ability of our engineering staff, it is more than likely that we can supply a machine to fill your needs. Solving problems built our business!

PACKAGE MACHINERY COMPANY

Springfield, Massachusetts

Chicago: 111 W. Washington Street

B B B A PACKAGE MACHINERY COMPA Over 100 Million Packages per day are wrapped on our Machines



Your product deserves GOOD PACKING.

The radical swing in favor of packaged foodstuffs from bulk sales has been one of the outstanding developments in merchandizing. It is a step forward toward public confidence, easier identification, sounder advertising and more efficient selling.

In this development Peters Machinery Company has played an important role by developing machinery that would produce as sanitary and protective a package as is known to industry.

These packages have a continuous interfolded and innersealed protective lining which entirely envelops the contents. This makes it moisture-proof, odor-proof and dust-proof. The Peters Package has been adopted by leading manufacturers everywhere and finds its way into millions of homes.

Let us tell you more about the Peters Package and the machinery necessary to produce same. A good product deserves a good package. Will be glad to aid.



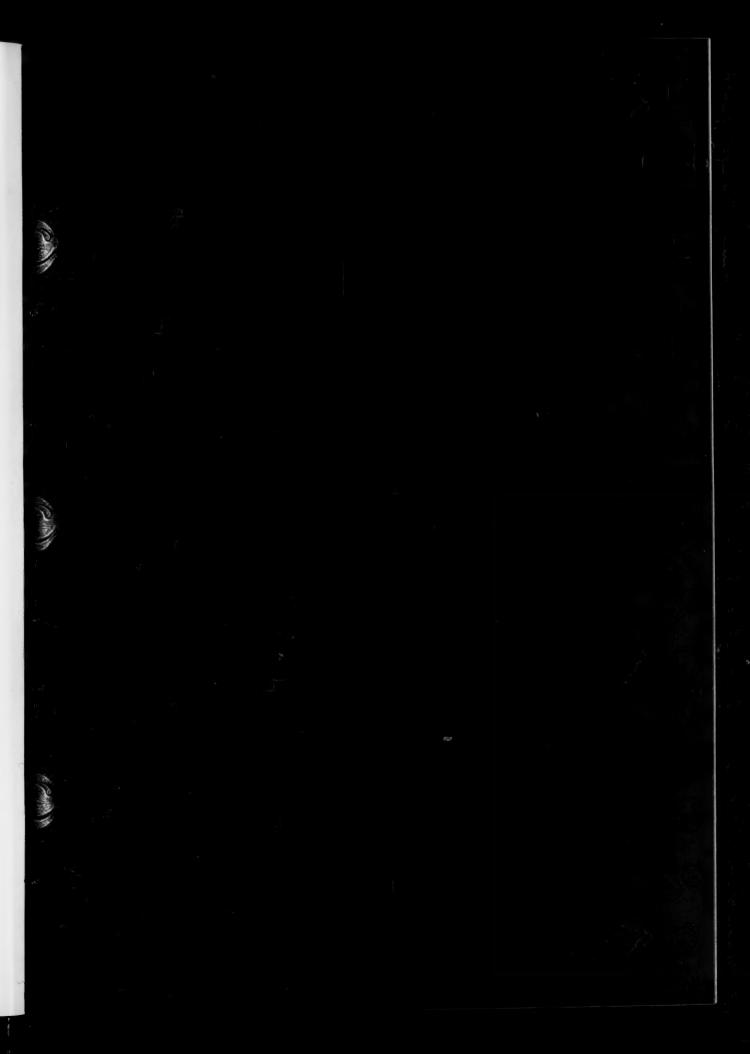
IN PIMENTO

GOODMAN'S

PETERS MACHINERY COMPANY

GENERAL OFFICE AND FACTORY 4700 RAVENSWOOD AVE CHICAGO.U.S.A





Hampden Fancy — Box Goverings

SIMPLIFY the package problem. Their beauty attracts, their quality sells more goods.

¶ HAMPDEN FANCY BOX PAPERS need but the slightest touch of printed design. In themselves they are beautiful, and carry that irresistible sales appeal.

Balsam

BUT BEE

Christmas Box Paper

one of the most recent Hampden creations
— why not try it?

Send for Samples.



Sold Exclusively By

HAMPDEN GLAZED PAPER AND CARD COMPANY

MANUFACTURERS HOLYOKE, MASS., U. S. A.

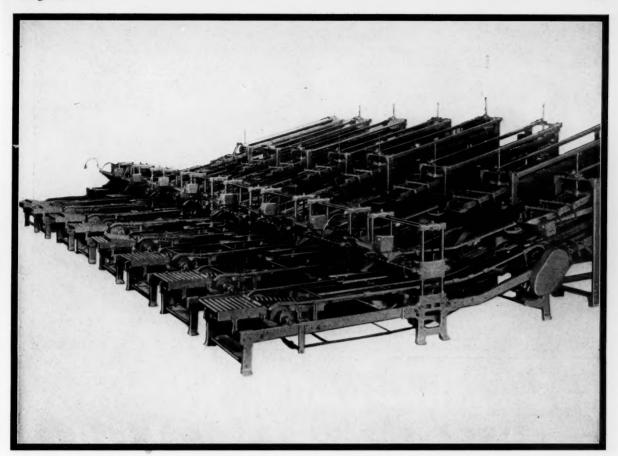
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Chicago Office and Warehouse 500 South Peoria Street

San Francisco Office CHARLES A. KAAS 200 Davis Street Canadian Agent
P. B. COFFIN

140 King Street, West
Toronto, Canada

Distributed By
FRED'K JOHNSON CO., LTD.
140 Southwark St.
London, S. E. I, England



Without the aid of any Labor

Here are eight Standard Top and Bottom Sealers manufactured for one of the largest producers of canned soup in the world. Each of these machines will seal the tops and bottoms of eight hundred fibre shipping cases each hour of the day. 100% Automatic.

Write our Engineering Department if you have a sealing problem

MAILLER SEARLES, INC. 135 Fremont St. San Francisco, Cal.

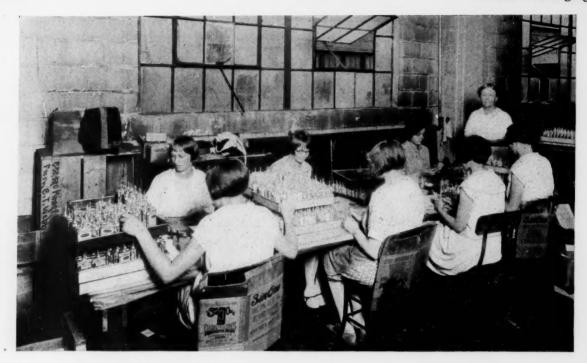
JOHN S. WILLARD & SON 306 E. 4th St. Los Angeles, Cal.



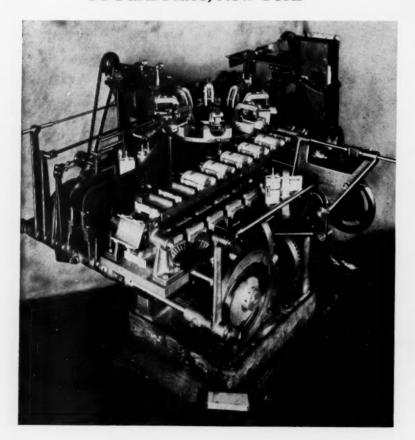
Rawson Street and Queen's Blvd., LONG ISLAND CITY, N. Y.

CHICAGO, ILL. 208 West Washington St.

LONDON, ENGLAND Windsor House Victoria Street, S. W. I.

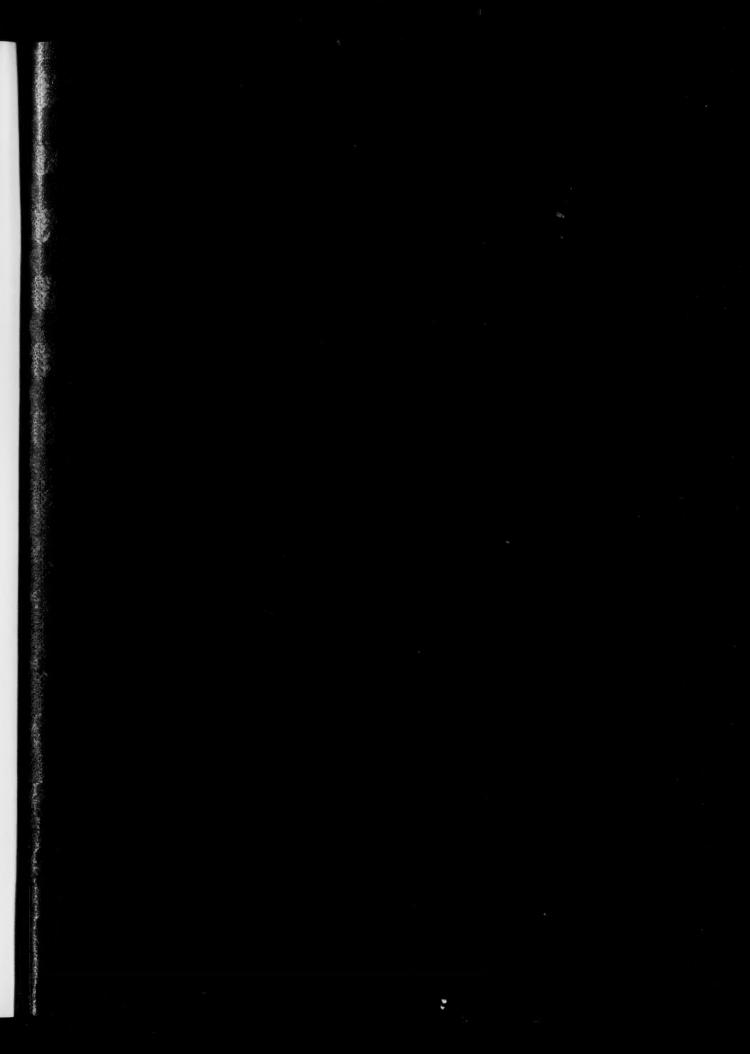


E. D. ANDERSON, Inc.
Automatic Labor Saving Machinery
11 Park Place, New York





This
Anderson
Machine
Replaces
Seven
Operators
at the
3-In-One
Oil
Plant







For Cifes of Character

Paperglas has seen a promittent part in the makeup of holiday packages. Produced in 16 emboused designs, its unusual beauty and transparency adds tone and character to any merchandise.

White I was the said place

WESTPIELD RIVER PAPER CO. Inc.

PAPERGLAS



Prices Reduced

On the World's Finest Packing Material

Mail Coupon for FREE Sample Roll and New Low Prices on This Amazing Packing Material

HE fast growing demand for Kimpak Crepe Wadding and our tremendously increased production now enable us to quote you substantially lower costs.

What Do You Pack?

What are your packing problems? Fragile articles? Liquids? Clocks? Scientific instruments? Highly polished articles, large or small?

For any quality product it is wise economy to pack in Kimpak. One of our service men will be glad to help you use it most economically-or produce special Kimpak protection, designed particularly for your product.

Kimpak's Unique Advantages

No other type of product known is like Kimpak Crepe



Wadding. It is an absolutely pure wood fibre product: clean, white, attractive. It is amazingly soft and cushiony. It is bulky,

springy, resilient. It is easier to use, less wasteful, less mussy than any other soft packing material we know of. Incidentally, for packing liquids, its remarkable absorbency ends all leakage worries, far exceeding parcel post regulations for mailing liquids of all kinds. For Kimpak absorbs and holds sixteen times its own weight in moisture!



Economical

With all its advantages one would expect Kimpak to be expensive. Yet even at previous higher costs Kimpak has proven its superior packing economy and great saving in

damage and breakage to manufacturers of almost every type of quality product all over the country. We will gladly give you names.

If you produce or pack products you are proud of, which need best possible protection in transit, and which you want received in perfect condition-to present a most

attractive, clean, quality impression when received - then learn the economy and advantages of Kimpak.

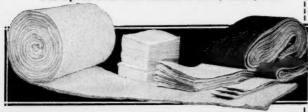
Mail the coupon for the new low costs and a large sample roll to try out for yourself.



Crepe Wadding

Trial sample awaits your request. The experience of one of our service men may assist in improving your present put-up. Fill in coupon 10DAY—no obligation to you.

Put Up for Your Convenience in Rolls, Sheets, Pads



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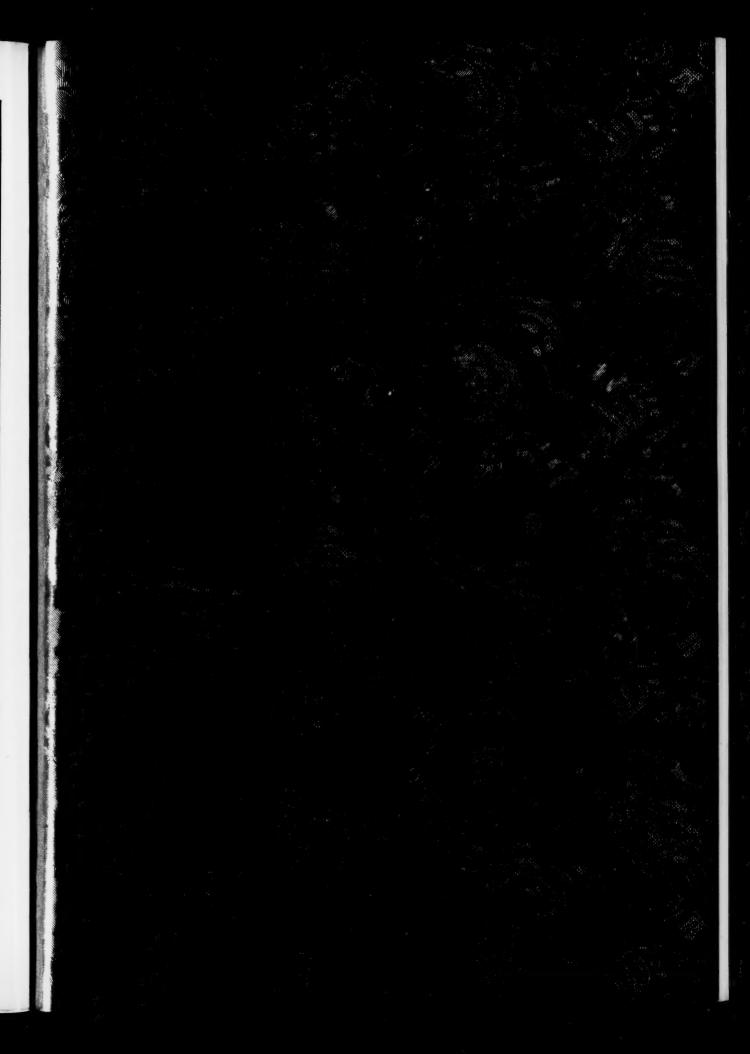
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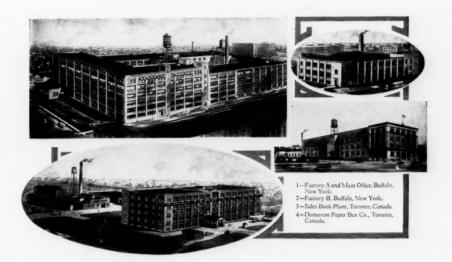


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Packaging Jumps Fish Sales

Wrapping and Trade Marking of Food Product Revolutionize Old Industry, Eliminating Waste and Enabling Adoption of Modern Merchandising Methods

By F. W. BRYCE

President, Atlantic Coast Fisheries Corp. of New York

the landings of which in New York

have increased 702 per cent from 1922 to 1928.

Fishing is one of the oldest of the major primary industries. In many ways it has made perhaps less progress in the last hundred years than any other large basic industry. Improvements have been introduced as to methods of catching and taking fish, but improvements in the marketing were very slow to come, though there has been notable advancement, particularly in the past three to four years.

Although huge quantities of fish were landed on the eastern seaboard in the primary fishing points of Gloucester, Boston and New York, a study by the United States Bureau of Fisheries indicated that the bulk of these fish was consumed within a few miles of the seaboard. The consumption per capita of fish in the United States was proven to be



Convenience and cleanliness in wrapping attracts the housewife

HE adoption of modern packag- much below that of European and indicates the great importance to ing methods has contributed Asiatic nations. Of the fish con- the industry of proper packaging and substantially to a remarkable sumed in the United States, the per proper packing. Many food manugrowth in the sale of fish. Modern capita consumption within ten miles facturers had found the way to packaging and packing methods as of the eastern seaboard was more eliminate the inedible portions of the yet largely are confined to haddock, than double the average of the nation. products they packed, with the Perhaps the statement just made result that their products were pack-

> aged, branded, and sold as specialties. The advantage of this practice to the manufacturer is obvious but the real advantage lay in cutting out economic wastes in handling and shipping inedible portions, with frequently a decided gain through the conversion of these portions into salable by-products.

The producers of fish found the housewife did not care to pursue the antiquated method of cleaning her own fish, any more than she would care to bake her own bread now that bread is properly packaged in a sanitary wrapper. The fishing business was slowly but surely coming to a point where it must get in step with methods employed by manufacturers of other foodstuffs.

About four years ago the fishing industry began to wake up. The Atlantic Coast Fisheries



Mounting and wrapping for fillets

Co. (the largest producers and distributors of fish in the East) began experimenting on methods of supplying the housewife with the edible portions of haddock and other fish so that all that remained for the housewife was to broil or cook the fish according to her favorite recipe.

Fish, like meat, has a high moisture content, and any wrapping or packaging material must be moistureproof. Vegetable parchment paper was selected as it did not absorb water.

The mere packaging of fish in its fresh state stimulated sales near the seaboard and, to some degree, further west. However, the fresh fish in fillet form was still perishable, perhaps even more so than the round fish, with which the consumer no longer wanted to bother, and which required the payment of hundreds of thousands of dollars of waste money in the form of transportation charges. The problem was then to take the fillets of haddock or other fresh fish and find a way to preserve their fullest state of freshness as to flavor, quality, and appearance. This problem we solved through the research work of Harden F. Taylor, formerly Chief Technologist of the United States Bureau of Fisheries, and now vicepresident of our company in charge of scientific research.

As a result, methods were perfected not only of retaining the full flavor and freshness of the fish, but also through the collaboration of our engineering department, a new and modern method for the quick freez- fish to the consumer ready for the ing of fillets was developed. This frying pan or the broiling grid. double insurance of quality and the combined methods enabled us to was just the first step; next must eliminate the necessity of old-fash- come the proper outside package or ioned glazing (dipping of the frozen container and proper means of refish in water), which, while it pro- frigeration for storage and transit to

the shipping and handling of thousands of tons of water annually.

For the first time, fish could be properly packaged. A small or experimental plant with a capacity of 3,000,000 pounds annually was provided in New York. While the plant was in the process of construction packaging methods were improved, if not perfected. We are rather inclined to think the latter is largely the case, for we have now been using identically the same package methods for a period approaching three years.

The method of packaging seems very simple when compared with some of the complicated methods of packing other products, but at least in the fish business it was revolutionary in character.

Special wrapping machines were devised and constructed whereby the



The packed shipping case

Taylor-processed quick-frozen fillets of haddock and other fillets are mounted and wrapped on paraffined cards. These cards bear a number of recipes and other information regarding the handling of the fillets. These recipes are printed on whitesurfaced cards prior to their being paraffined. The fillet when mounted on the card is then automatically wrapped in vegetable parchment paper, which is paraffined on both sides. The result is a perfectly sealed sanitary product which carries the

The packing of the single fillet

tected the surfaces of the fish, caused general distribution points and from general distribution points to the trade, and, in turn, the consuming public.

> After considerable study and research we adopted the use of corrugated boxes lined with asphalt paper. These boxes kept out moisture and the air chamber of the corrugated box provided something of insulation. Boxes of the proper size to hold fifteen pounds of fillets were made and tested. The box was adopted and has now become stand-

> Special study was given to methods of transportation and distribution with satisfactory results.

Our experimental plant in New York ran to top capacity from the day it started, necessitating the construction of a new and larger plant, which was finally located at Groton, Conn., where the plant is now situated alongside deep water.

The Atlantic Coast Fisheries Co. operates a fleet of eighteen steam beam trawlers, each carrying a crew of about twenty-five men. These vessels bring the fish to our own wharfs where they are automatically weighed and conveyed into our plant. Next, automatic conveyors carry them to the heading tables, the finning tables, and the filleting tables; then they go through the Taylor process to the continuous quick freezing machines.

These continuous quick freezing machines are unique in character.

The fish are placed on smooth aluminum plates, which are kept glisteningly clean by automatic methods. These plates are furnished refrigeration by a patented method and, while being so refrigerated,

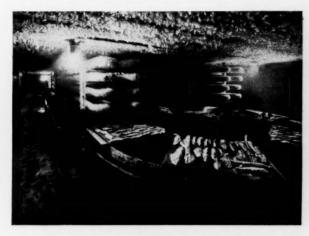


The sealed shipping case

travel through a cold room kept These also are packed in asphalt-lined made possible the delivery of a at a very low temperature. From corrugated boxes of fifteen pounds net highly perishable commodity to any the freezing plates, the fish are sorted into two sizes: those that are mounted on cards and wrapped in the successful employment of mod-important to the people of the Middle vegetable parchment paper, as de- ern merchandising and marketing West where both the taste and need scribed above, and those that are methods, the question of transporta- for fish is being satisfied; for in-

weight each.

city, town, or hamlet in the United While modern packaging permitted States. It has been particularly





Freezing preliminary to packing

Special machines wrap the fillets

what we are pleased to call a "loose" pack, which meets the needs of the a new type of refrigerator car, which West is being somewhat alleviated. hotel or restaurant people who have to cut their fish into portions and who do not wish the bother of unwrapping each individual fish.

permits shipment to any point in the United States under proper and to come, but without modern packperfectly controlled temperatures.

odd sizes or small fish, which go into tion was still a problem. Recently stance, the deficiency of iodine in the we have obtained the exclusive use of diet of the people in the Middle

> Further improvements are bound aging the other improvements would Modern packaging methods have be of little avail.

William A. Smith Package Promotion Consultant

N January of this year announcement was made of the appointment of certain members to a Consult-

ing Editorial Board of Modern Pack-AGING, established for the purpose of extending to readers a service which, it is believed, must form an important part of any industrial publication. It was further announced that additional members would be selected from time to time in order to round out a complete group of authorities on the several subjects that relate to the design of packages and the economic and operative problems of packaging.

Art and sales promotion as applied to packaging are recognized as important factors in the distribution of merchandise. Readers will therefore be interested to know that arrangements have been made to secure the

cooperation of an authority on such subjects, and it is with considerable pleasure that Modern Packaging announces the appointment of William A. Smith.



William A. Smith Package Promotion Consultant

R. SMITH joins the Editorial Consulting Board with a background of unusual experience. Born in St. Louis, he there received his art education. Later he served an apprenticeship in a lithographic and printing company, was art director on two daily and Sunday

> newspapers, a magazine publishing company and several advertising agencies. Mr. Smith conducted his own art and advertising service company in New York until 1917 when he became associated with a lithographing house at Rochester, N. Y., in charge of art and sales promotion work. At present he is associated with the Rochester Folding Box Co. at Rochester as a visualizer in the supervision of art and sales promotion.

> Mr. Smith is not only an artist and designer but an experienced advertising and merchandising man as well. His work has brought him in contact with the leading national advertisers of the country. His articles

published from time to time in MODERN PACKAGING, together with his assistance in a consulting capacity, will be of interest to readers.

Folding Cartons for Shoes

One-Piece Boxes of Covered Cardboard That Open in Front Embody Several Features of Advantage to Wholesale and Retail Dealers

> By C. N. CAHILL Cahill Carton Co.

THE public has for many years

been accustomed to the ap- this carton is the same as for any pearance on the shelves of shoe other folding carton excepting that dealers of undecorated and stand- it has been possible to cover cardardized shoe boxes. Little effort board with attractive embossed paper has been made to break away from covers and manufacture folding carsuch established practices, but with tons from this covered cardboard. the advent of the urge for colorful The successful working out of this

and attractive containers for almost problem has required considerable every type of merchandise there is experimental work before the shoe

One-piece, paper-covered, tuck-in shoe boxes. At left, rear end of box showing tuck-in closure; right, front end open to permit removal of shoes while box is on shelf; center, front end closed showing tab and index card

a trend toward the individualization cartons could be made on the heaviest of shoe boxes.

The recognition of the part that the lined cardboard. a container plays in the merchandising of its included goods-the ability of the box or carton to convey the manufacturer or dealer-cannot be overlooked, and thus it is that more and more attention is being given on the side of to various phases of package design.

A new style of shoe box that embodies several features in containers the door open. of this type is shown in an accom- A shoe can be panying illustration. This one-piece removed from box or carton offers convenience in this carton handling on or off the dealer's about shelves, permits the economic use quickly as the of embossed or decorative paper shoe box can be covers and creates an impression of removed from quality for its contained product the shelf and that is of decided advantage to both the lid taken wholesalers and retailers.

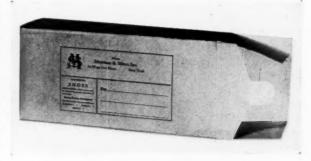
type of folding box machinery from

THE principal difference between I the cartons shown and old style, quality and establish the name of two-piece set-up boxes is that the former opens in front. When the door of the carton is open, the flanges

> the door automatically hold off. The other

The manufacturing process for shoe can be removed without handling the carton at all, or the shoe that has been removed from the carton can be replaced and the door closed in quicker time than it takes to tell about it. It is recommended that only one shoe be wrapped in tissue—in most cases the left shoe-and this be inserted first into the carton. Then the right shoe, which is untissued, is inserted toe first with the sole toward the opposite side of the carton.

> It will be readily seen that the sales people do not soil their hands in operating with these cartons. Furthermore, where there is more than one shoe box on the shelf there is no falling down of cartons when this type is used. When the shoes have been removed from the carton, the index card which fits into two slots on the door of the container is removed and this card serves as an easy method of sizing up, a check against the cash receipts, etc., besides showing that the carton is empty. The label designs of the retailer or manufacturer are printed on the paper covering the carton. This printing is done while the covered cardboard is in sheet form and before cutting out the carton, which means that it is possible to run from four to sixteen up on a sheet so that speed in manufacturing is obtained.



Shipping container for shoe boxes showing tuck-in end

Besides the great convenience and beautiful appearance of the carton in the retail store, there is an actual saving to the shoe manufacturer in money, besides a saving of 93 per cent storage space, approximately 50 per cent packing time and 75 per cent marking time. The shoe manufacturer does not handle the cartons to mark each with the stock number, description, size and width as these are printed, stamped or written on the index cards, thus entirely eliminating the handling of boxes. Where the carton is set up in the factory by hand, an average cost of \$.90 per M is obtained. This means that the carton is set up with the doors open and is ready for packing upright on the packing tables.

Where the production of a manufacturer is of sufficient volume, an automatic sealing machine which seals the rear flaps of the carton and

Wrappings for Chocolate

Dimensional Data, Diagrams and Specifications of Inner and Outer Paper Coverings for Tablets, Bars and Croquettes

By E. T. ELLIS

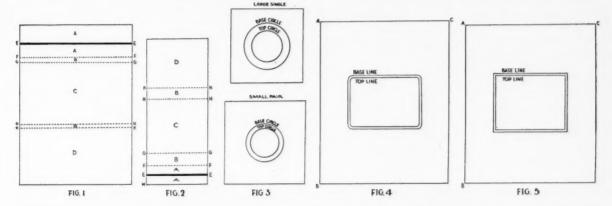
N this article discussion is confined to a few of the cheaper types of both outer and inner wrappings largely used at the present time by different chocolate packers. The character of these, although they all consist of paper, is subject to considerable variation. The outer coverings usually are of thin but strong paper glazed on the outer side, while the inner wrappings are either of silver paper (lead foil) or of greaseproof paper, or in some cases the first inner wrapping is of greaseproof paper, followed by a second one of lead foil.

Figure 1 shows a popular paper delivers them on a conveyor or packing in which tablets or bars of B being the sides, the two portions

For our purpose we will say that these bends in each case are right angles, although in certain models the angle is greater or less than ninety degrees.

As to actual dimensions of this type of paper wrapping, the following should be noted: Total length, $3^{1}/_{2}$ in.; total width, $1^{3}/_{4}$ in.; thickness of chocolate, 1/8 in.; weight of wrapping alone, (i.e., weight of packet uncharged) under one-fourth of an ounce.

Figure 2 shows another type of outer wrapping which is widely required by chocolate packers. In this drawing C represents the top of the wrapping with D as the base, B and



thirty per minute may be leased or bought outright. This operation on a large production basis costs the manufacturer about \$.20 per M, and by using the conveyors for packing the time of this operation is greatly reduced.

the carton is on the part of the shoe retailers. One possibility which the carton holds out to the shoe industry is that of standardizing the sizes to the shoe manufacturers for their general stock use. Of course where the retailer specifies a certain size and color to the manufacturer it is necessary for the manufacturer to supply him with this size and color.

conveyors at a speed of approximately milk chocolate are marketed by auto- A and A, separated by the gluing line carries printed matter and D is the base which is usually blank. The two portions marked A', A, which are separated by the line of adhesive EE, are parts of the under-base, and The principal benefits received from are attached after charging to the back of D. This wrapping has open ends, but B and B are its two small sides, respectively.

> The dotted lines FF, GG, HH and KK show clearly how this packet has to be bent to put it together.

matic machines. In this drawing EE, are again portions of the under-C is the top of the packing which base, which are attached to the back of D. The whole of the outer portion of this paper wrapping (except A, A) usually carries some print. As in the former instance, the ends of this model are open and bends which approximate right angles are again made along the lines KK, HH, GG and FF. The total length of this paper wrapping measured from L to M in the drawing is $4^2/_5$ in., while the total width measured from H to H is $1^7/8$ in. The thickness of the chocolate is 5/16 in., while the weight of the wrapping uncharged is again under one-fourth of an ounce.

N. B. Readers are asked to note that occasionally chocolate packings are patented or otherwise protected. In all cases, therefore, before proceeding with the production of the lines described and any others, the usual inquiries should be made through patent agents.

(Continued on page 38)

Making Each Package Its Own Ice Box

Adaptation of Paper Containers as Miniature Refrigerators Made Possible through Use of Dry Ice—Description and Specifications of Cartons Used in Successful Distribution of Perishable Commodities

By D. E. A. CHARLTON

latest of uses to be made of original is no possibility of dampness. packages is the adaptation of a paper

container as a refrigerator-a dry icebox. Contrary, however, to our general impressions of ice boxes, there is no drainage problem to be considered; the package presents a compact, sanitary unit and there is no deterioration of any of its component parts. To understand this, a brief description of the contained refrigerant-Dry-Ice-is in order.

Dry-Ice is the registered trade mark for solid carbon dioxide (CO2) which is manufactured by the Dry-Ice Corporation of America. This refrigerant, which is prepared in blocks 10 in. x 10 in. x 10 in. and weighing approximately forty pounds each, resembles white marble and is 109.3 deg. below zero, or 141 deg. colder than water ice. Dry ice in an ap-

proved insulated storage box will lose less than ten per cent of its weight each 24 hours. For shipment, the blocks are expressed in balsa wood shipping boxes containing 200 or 300

The use of dry ice offers a number of appreciable savings over the ordinary methods of refrigeration, notable

HE versatility of packages has Weight, for a package of ice cream so been and is continually being refrigerated weighs only about onedemonstrated. We find pack- fourth as much as if packed for shipages used for every conceivable purment the old-fashioned way; space, pose, not only as original containers since one pound of dry ice refrigerates but, and almost as frequently, for ordinarily as much as fifteen pounds other uses after the former contents of water ice; corrosion is eliminated have been removed. Among the due to the absence of brine, and there

Dry ice has had a wide acceptance



Window display featuring "Dri-Pac" container for ice cream

among ice cream manufacturers, caterers, confectioners, butter makers, meat and fish packers and other companies who are concerned with the shipment and distribution of perishables. Other uses are found in oil refining for the removal of paraffine, for testing electric cables at low temperatures, for freezing quicksand among which are the following: in tunnels and foundations, in testing

insulating qualities of building materials, for quickening cooling and producing speedier crystallization in candy making, and for rapid cooling and condensing low boiling point distillates in the chemical industry.

With this brief explanation of what dry ice is and does, let us consider the packages that are used in the distribution of various commodities that

> require adequate refrigeration in delivery. There are in all eleven standard and approved container sizes recommended by the Dry-Ice Corporation. These may be properly divided into four groups: round cartons, corrugated containers, service cans and "take-home" cartons or dry ice boxes.

The round cartons are spiral wound fibre containers adapted to pint and quart sizes. For the pint size, the outside package consists of a 3-pt. container $(4^{1}/_{2} \text{ in. } \times 6^{1}/_{8} \text{ in.})$ provided with a liner of single-faced corrugated board (53/4 in. x 131/4 in.) and two discs $4^{1}/_{8}$ in. in diameter of double-faced corrugated board which are placed at the top and bottom when the package is assembled. The inside

package which contains the ice cream or other commodity may be of accepted design, usually a spiral wound fibre carton that bears the trade mark or legend of the company whose products are included. This may also be duplicated in label form on the outside container. The dry ice is placed in an envelope or bag to prevent customers from touching a material that is so



Refrigerated package for brick ice cream



A miniature ice box for ice cream packages

extremely cold; in fact, the dry ice should not be handled excepting with cotton gloves. The liner together with the corrugated discs act as an insulation so that the full refrigeration properties of the dry ice in the package are retained.

The corrugated containers are furnished in seven different sizes and are adapted to the following: 1-pt. bricks, 1-qt. or 2-pt. packages, 2-qt. or 4-pt. packages, 4-qt. or 8-pt. packages, 12-qt. or 24-pt. and 5-gal. packages. Specifications on these are as follows:

1-pt. Brick: Outside of doublefaced (no test) corrugated board, slotted type, equipped with crossed spacers, 1 in. x 12 in. with two breaks $3^{1}/_{4}$ in. from ends. Inside dimensions of cartons, $4^3/_4$ in. x $4^3/_4$ in. x 5 in.



Lined barrel for meat. Eight pounds of dry ice for 24-hour shipment

age of double-faced (no test) corrugated board, slotted type, equipped



Packaged ice cream shipped in balsa wood case with dry ice

with crossed strips of double corrugated as spacers. Inside dimensions of cartons, 8 in. x $4^3/_4$ in. x $5^1/_2$ in.

2-qt. or 4-pt. Package: Outside package of double-faced (no test) corrugated board, slotted type. Inside dimensions of cartons, 8 in. x $4^{3}/_{4}$ in. x $8^{1}/_{2}$ in.

4-qt or 8-pt. Package: Outside package of double-faced corrugated (no test) board with end pads of double-double corrugated and an inside liner of chip and chip, of 3-layer corrugated, inner layer only double Inside dimensions within liners, $8^{1}/_{2}$ in. x $8^{1}/_{2}$ in. x $8^{1}/_{2}$ in.

8-qt. or 16-pt. Package: Outside package of double-faced corrugated (no test) board with end pads of double-double corrugated and an inside liner of chip and chip of 3-layer corrugated, inside layer only double Inside dimensions within liners, $8^{1}/_{2}$ in. x $8^{1}/_{2}$ in. x 16 in.

12-qt. or 24-pt. Package: Outside package of double-faced corrugated test board with inside liner of chip

1-qt. or 2-pt. Package: Outside pack- and chip, of 3-layer corrugated inside layer only double faced. Inside dimensions within liner, $8^3/_4$ in. x 12 in. x 16 in.

> 5-gal. Package: Outside package of double-faced corrugated test board with inside liner of chip and chip, of 3-layer corrugated, inside layer only double faced. Inside dimensions within liner, $9^{1}/_{2}$ in. x 25 in.

> A 5-gal. single service can, having standard inside dimensions, is provided for those who distribute in bulk. These cans are usually placed in the 5-gal. corrugated packages just described.

> The "take-home" packages or Dry Ice Boxes are furnished to hold one pint only of ice cream sold by restaurants, confectioners and soda fountains. These consist of knock-down, lithographed, slide and shell cartons, two paper bags-one for dry ice and one to hold dry ice and ice cream. Ice cream in the Dry Ice Box is kept firm for six hours after purchase, although under certain conditions it



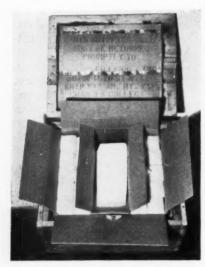
Lined corrugated single-service container for 5 gal. bulk or package ice cream

longer. Top and bottom of the package are each made from a single piece of board, so scored that when folded



Lined round fibre container for ice cream

two of the sides are provided with five thicknesses of board with air spaces between. The other two sides are of single thickness. When assembled, the sides alternate, the fivethickness sides of the cover sliding over the single-thickness sides of the bottom so that the package is pro-



Container with insulated liner for 60 lb. of butter, using 6 lb. of dry ice for 48-hour shipment

tected or insulated on all four sides with six thicknesses of board.

The package is decorated in blue in a mottled effect and carries the outline of a miniature ice box. The popularity of these "take-home" packages is reflected in the sales of a

may remain firm for several hours leading New York confectioner, who on the cheaper variety of fancy states that since introducing them their "take-home" ice cream business has increased between 500 and 600 per cent, notwithstanding an extra charge that is made to cover the cost of packaging.

Paper Box Classifications

HE Interstate Commerce Commission has just announced an important decision in the case of Deline Manufacturing Co., against Chicago, Burlington & Quincy R. R. Co., holding that double first class rating, less than carload shipments, in western classification on set-up paper boxes, outside measurement exceeding one inch in depth and exceeding fifteen inches length, width and depth combined, has been found unreasonable.

The following is an abstract of the case as stated by the Commission:

"Complainant manufactures candy boxes at Denver, Colo. It alleges by complaint filed Oct. 12, 1926, as amended, that the rating of double first class in western classification on paper candy boxes exceeding 15 in., length, width and depth combined. outside measurement, and on all sizes of paper and candy boxes with a satin ribbon and bow across the top is unjust and unreasonable. A rating of first class is sought for the future.

"Candy boxes are not classified under an individual item, but are included within the general description of paper boxes. Fancy boxes are defined by the classification as those trimmed with fabric, and are rated double first class, any quantity. Boxes with a satin ribbon and bow across the top come within this description.

"In western classification untrimmed paper boxes are rated first class, less than carloads, if they do not exceed one inch in depth, or if exceeding one inch in depth, the length, width and depth combined does not exceed fifteen inches, outside measurements. The larger sizes take double first class.

"Briefly stated, complainant seeks a rating of first class on the sizes of untrimmed paper candy boxes which are now rated double first class and across the top, is not unreasonable."

"Complainant's boxes range in capacity from two ounces to five pounds, and vary in size from 3 x 3 x 0.25 in, to 8 x 14 x 3.5 in. Many of the boxes are of novelty designs, but most of them are either retangular or heart-shaped. They are covered with papers of various colors, with or without satin ribbon and bow. The average value of some of the various styles of paper boxes shipped by complainant is approximately 43 cents per pound, and the average weight 7.86 lb. per cu. ft. The ribbon and bow, fastened to the box, costs about 4.5 cents for the 5-lb. size. Greeting cards or pictures are displayed on some of the boxes. According to complainant some of the French paper-covering costs as much as satin purchased for the same purpose. Cardboard containers are used to protect the boxes and these containers are then usually packed in wood veneer cases for shipment.

"For the first 10 months of 1927, the paper-covered boxes, including those with ribbons, constituted about 83 per cent of complainant's output. The remainder were of a higher grade. Complainant estimated that its total monthly less-than-carload shipments during the closing months of 1927 would reach 15 or 20 tons a month. Shipments are generally made f. o. b. factory.

"Defendants show that celluloid and pyroxylin boxes, lined or trimmed, and not lined or trimmed, as above described, weigh 18 to 38 lbs. per cu. ft., and that their values are from \$10 to \$56 per cu. ft., an average of \$1.18 per pound.

"We find that the double first-class rating assailed on set-up paper boxes, S. U., outside measurement exceeding one inch in depth and fifteen inches length, width and depth combined, less than carloads, in western classification, is, and for the future will be unreasonable to the extent that it exceeds or may exceed a rating of one and a half times first class. We further find that the double first-class rating assailed on paper boxes, any size, any quantity, in western classification, with satin ribbon and bow

Boosting Hardware Sales

Use of Colorful Cartons and Display Containers Secure Attention from Customers for Utility Items and Increase Distribution for Retailers

> By RALPH CONDER Boston Woven Hose & Rubber Co.

ACKAGING of merchandise in the hardware field has been several steps behind other industries such as food products, toilet preparations and similar groups in which the design and decoration of containers and displays have followed the trend toward greater use of color, original design and other factors that are rec-

the hardware field toward more colorbution channels for hardware. With distinctive colors, serves to attract

However, at least two factors have the individual tuck-in cartons is contributed to bring about a swing in shown on the front cover, in color, of this issue. As may be seen, both ful and attractive packages. The carton and container convey the first of these is the recognition of what utility of the article-showing that has been accomplished by such pack- the nozzle may be used as a stream, ages in other industries, and the shower, spray or shut-off-and this second is the enlargement of distri- treatment, together with the use of





This display suggests a need for the article

Trade mark characterizes cartons and display

While it is true that the use of packages has long been established in the hardware field, most of the boxes and containers have offered only a utility or convenience value and comparatively little attempt has been made to present packages that assist sales. Pehaps this has been due to the fact that merchandise generally classified as hardware is of such a nature that its distribution is based more on demand than a desire to purchase.

ognized today as valuable adjuncts of the growth of chain stores and other attention on counter, shelf or in the merchandising as applied to packages. retail distribution outlets for hard- store window. ware, manufacturers have become more cognizant of the fact that unless certain items are attractively packaged the merchandise does not receive the attention given to other was wrapped in brown tissue paper

> One of the latest hardware staples to appear in new dress is the Boston Spray Nozzle, a standard article in the hardware and general stores for the past thirty-five years. A reproduction of the display container and sity of doing them up separately.

A glance at the old method of packaging of the nozzle, as shown in an accompanying illustration, is interesting in comparison. Each nozzle and a dozen packed in a corrugated case, making no pretense whatever of serving as a display carton although providing the jobber a means for him to parcel post a dozen nozzles to his various retailers without the neces-



Utility suggested on cartons and display container

The old adage, "Goods well displayed are half sold," has made itself felt in the nozzle trade, and the insistent demand from live hardware dealers every year resulted in the new package.

The nozzle cartons and display container follow in general design the lines of packages which the Boston Woven Hose and Rubber Co. has used for many years for three of its other products, Bull Dog Friction Tape, Good Luck Fruit Jar Rings and Good Luck Hose Washers.

These packages are shown in accompanying illustrations.

The Bull Dog Friction Tape display container features the bull dog head trade mark in natural colors and is so made that when closed it forms a folding carton for the individual packages or cartons. The background color is blue with lettering in red and

black. The tape which is wrapped in lead foil comes in $^3/_4$ -in. width and is packaged for the following rolls or sizes: 8-oz., 4-oz., 2-oz. and 1-oz. The individual cartons are tuck-in and carry the same color scheme as shown on the display container.

Good Luck Jar Rubbers are pack-

aged one dozen to each individual carton, two gross of these being packed in a display container. The color scheme is red and yellow and green outline lettering. The illustrations shown are in natural colors. Six containers are packed in a printed, solid fibre shipping case weighing 29 pounds.

The Good Luck Hose Washers are packaged one dozen to each carton, 24 cartons in each display container and packed in shipping cases holding



Old method of packing Boston nozzle

6 and 24 containers. In this container, as with the jar rings container, the display box forms a tuck-in carton when folded.

We have no machines for packaging Boston nozzles as these are packed by hand, but we use automatic machines of our own design and construction for packing Good Luck Rings and Bull Dog Tape.

By means of such display which create attention to the goods and their utility, it has been possible to increase sales on items already well established, placing them in a class of products the sales of which can be stimulated by up-to-date packaging practices.

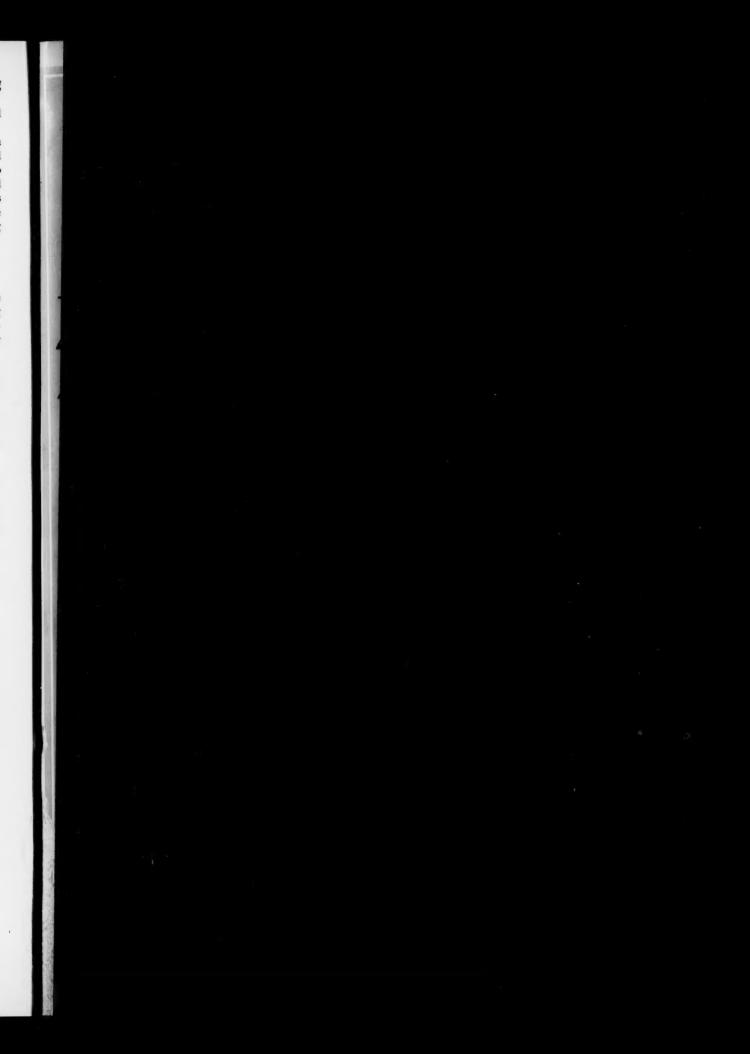
Container Standardization

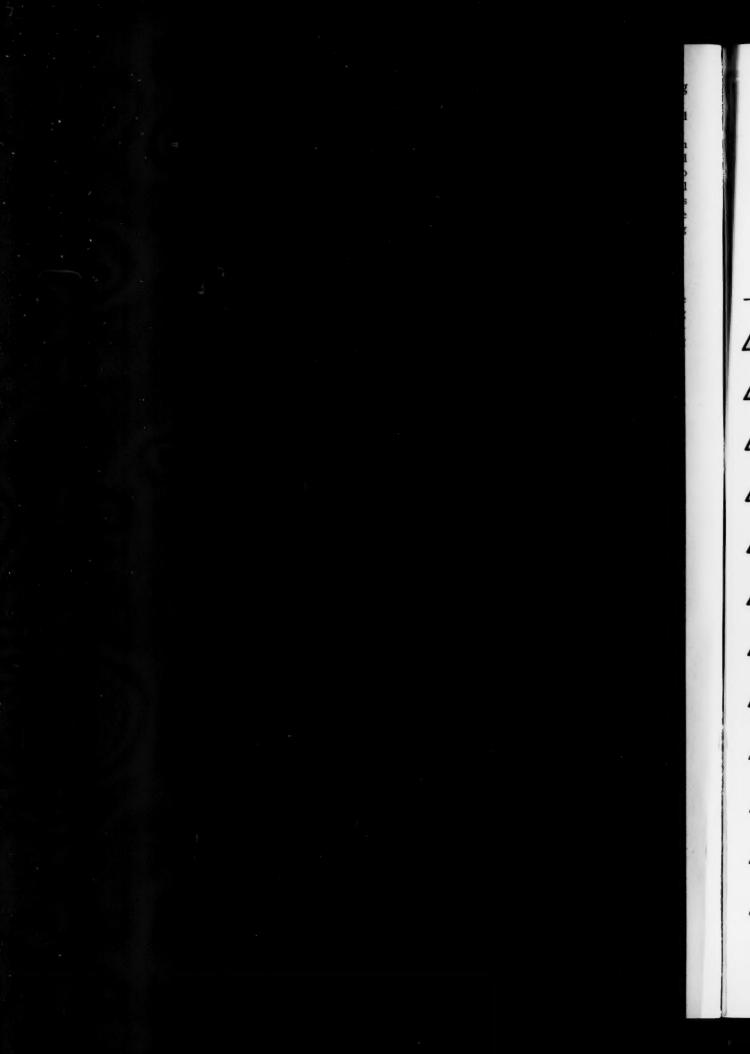
THE Department of Commerce has just issued the following notes on the standardization of various forms of containers, covering those used for various purposes.

More than 750 replies have been received to the questionnaire on can sizes which was recently circularized by the Division of Simplified Practice among the entire canning trade. This survey is being conducted in cooperation with the National Canners Association in an effort to ascertain the diversity of sizes existing today in this type of consumer container.

For some time past it has been the opinion of some of the leaders in the drug and pharmaceutical industries that much might be accomplished through a simplification program for the reduction of the great variety and sizes of bottles used in the drug trade. A preliminary conference of some of the representatives of the various drug, pharmaceutical and proprietary associations and representatives of the glass container association met at the Department of Commerce on July 6 to discuss a proposed survey to ascertain the need for simplification.

In a recent address before the National Association of Retail Grocers, Henry Lohmann, Secretary of the United Retail Grocers Association of Brooklyn, called attention to the need of simplification of the consumer container. "The consumer is unnecessarily paying out hundreds of millions of dollars each year in the United States in non-standard size food containers, created in many instances by manufacturers, for competition with the standard size containers, special sales, or to beguile the innocent housewife with the idea she is getting a full weight bottle or tin because the appearance is just the same," he said, adding that it should be the duty of the manufacturer, the wholesaler and the retailer to educate the consuming public when buying food products, to consider what they pay for the product itself. That fancy-shaped containers, made up in special sizes, or that when the non-standard sizes are manufactured, will require special molds, labels, corks and shipping containers, and that all of this special work entails considerable expense and costs. Simplification of the consumer containers, will curtail the number of sizes carried by the retailer, which naturally will reduce inventories, and regulate the selling to standard sizes, and the consumer will then buy according to quality and price.





GAIR FOLDING BOXES

CREAM

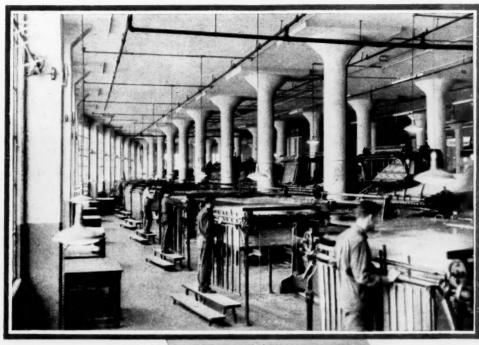
Effects in Green, Black and Gold



ROBERT GAIR COMPANY
GRAYBAR BLDG., 420 LEXINGTON AVE., NEW YORK CITY



We are at the flood of another awakening. The beautiful has entered the shop and the market place. The manner in which merchandise is offered compliments the fastidious buyer, and the language of color makes its appeal to the fashionable and the lowly, being understood by both. Not only color, but the way color is used is understood. Gair Folding Cartons for the finer luxuries are often as exquisitely designed as the Grecian cosmetic jars in museum collections; in fact, these classic pieces frequently influence modern commercial design.



Sentinels of Quality-Ideal Conditions for Cutting and Creasing

To merchandise successfully, put the widest distance between ugliness and your goods that is possible with artistic help and experience. Mediocrity can put success to flatters affects vely as ugliness.

Our

erful

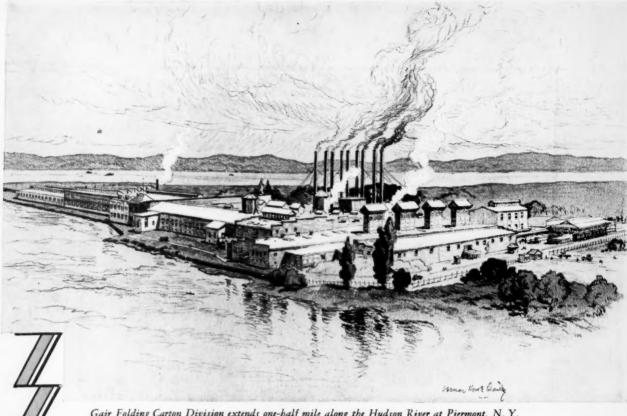
con-

A great many colors are at a securial to illustrations show themes in and hard and present and original. In the manufact stantly weaving strands of color lar unforgettable effects—effects sales quality. We reproduce the printing and lithographing press feeling and an understanding of the pose—they are not just printing jobs only in the finer arts of printing and ography, but also in the secondary prof cutting and creasing, these Gair Fold Cartons are formed by die-makers some whom have the skillful touch of twent five years of experience. They work ou intricate structures symmetrically, and

He is a great artist who can serve the package merchandiser with a genial design done in colors which stir friendly curiosity and prompt purchase. Our Creative and Design Department is available for such service.

symmetry is another term for Folding Car-

ton beauty.



Gair Folding Carton Division extends one-half mile along the Hudson River at Piermont, N.Y.

Practical Packagery

Gair Folding Cartons are divided into three families, all with a common virtue—they are correct in structure. There is the vivacious group that glories in an atmosphere of luxury conferred by rare colors deftly restrained by the artist's brush. There are those that do the practical service of life and reach the pantry shelf, where neatness harmonizes and trade mark design becomes familiar. Then, there is the great tribe of mixed Cartons, assertive in color and dominating in effect. They are strong, made in various styles and shapes and are protective. But behind the manufacture of Gair Cartons is a sympathetic understanding of your Production Manager's problems and a knowledge of packing and sealing processes. The automatic filling machine is on friendliest terms with Gair Cartons.

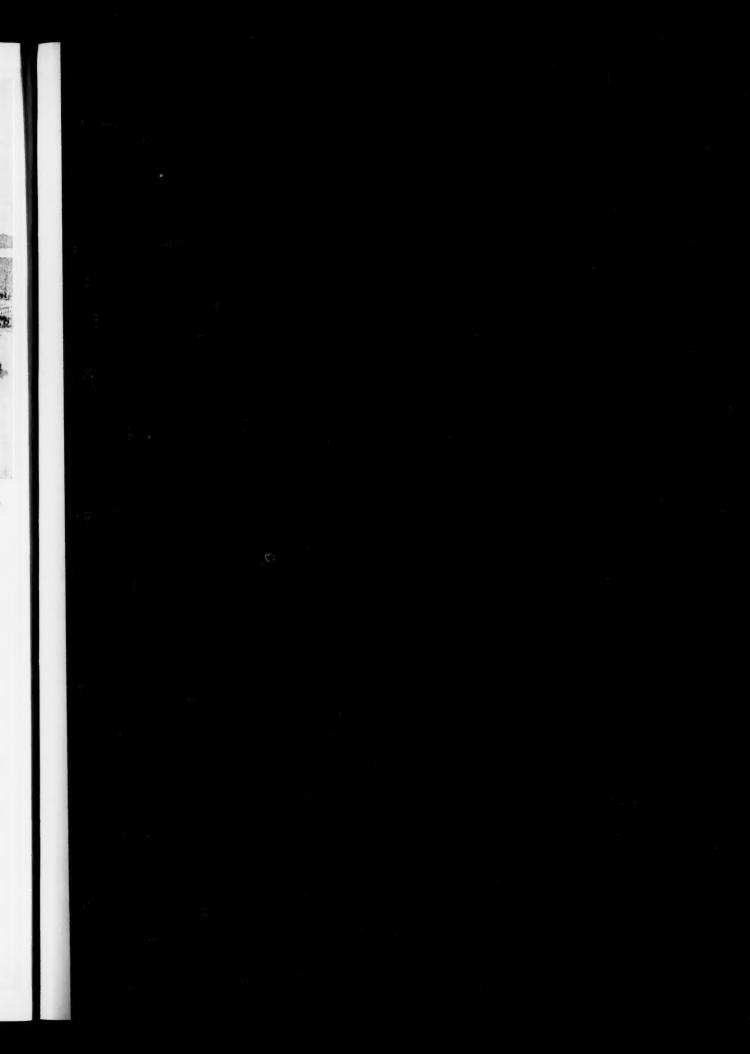
Gair Box Board lends itself gracefully to Multi-Color Printing and Lithography, but color and design do not complete the perfection of the Carton. Automatic packing requires Box Board of character, such as endows the Carton with a smooth, snappy, pliant quality that facilitates the operation. The five large Gair Box Board Mills control the quality of twelve hundred tons of Box Board daily setting up permanent standards, colors and finishes, thereby minimizing the ever-present danger of variation—the enemy of Printing and Lithography, as well as easy automatic packaging.

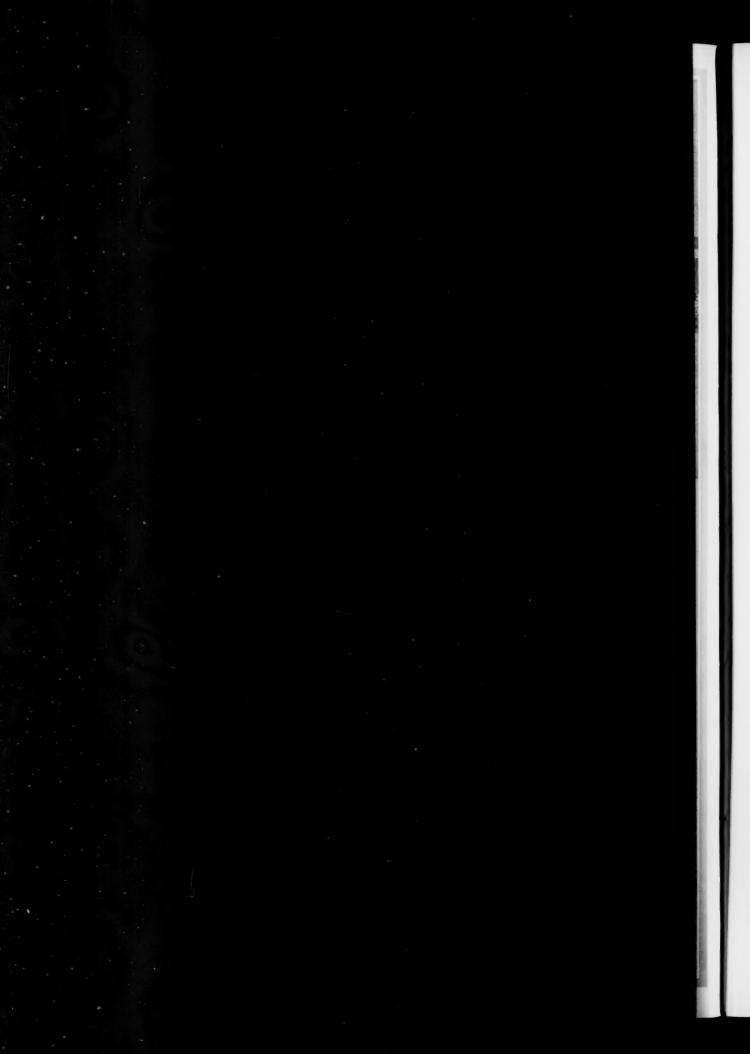
Robert Gair Company

GRAYBAR BLDG., 420 LEXINGTON AVE., NEW YORK CITY

Box Board Mills

New London, Conn. Tonawanda, N. Y. Piermont, N. Y. Haverhill, Mass. Quincy, Ill.





The Packaging of Butter Scotch

Modern Methods Characterize Preparation for Distribution of Established Favorite Confections-Machines Cut to Size Each Piece, Place Exact Number in Each Carton and Effect Closure

By EDWARD THOMPSON

shapes and sizes—a demand are performed on one floor. not unaided by extensive advertising time sweets and candies.

While little if any change has been made in the formulas used in the actual preparation of the latter, production practices have been improved, more sanitary conditions have been effected and the candy factory of today is, generally speaking, operated on a more efficient basis.

One of the most notable changes is that to be found in the packaging operations employed. Where formerly this entire work was done by hand, today, through the use of automatic or semi-automatic equipment, greater and more economical production is being secured, and the public is assured a product that fully measures up to standards of full weight, full size and sanitary quality.

An excellent example of a candy plant that employs modern methods throughout is that of Kerr Brothers, packaging equipment is used for tion, while the former, supplied prin-N. Y., manufacturers of Kerr's Butter seventy-five pounds, is removed to a which does not require the display Scotch and Kerr's Mint Toffee. table from which it is fed to a caramel container, carry only a type designa-Complete operations, from the mixing wrapping machine. The batch or tion. The boxes and display con-

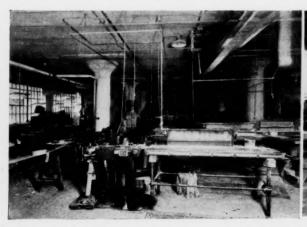
campaigns—has in no way dimmed a and preliminary cooling of the butter waxed paper, each piece or two well-established market for the old scotch or mint toffee-the same squares of the candy at the rate of



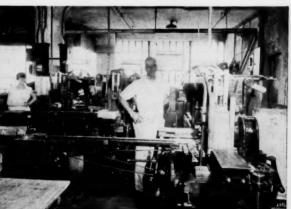
Display carton used by Kerr Bros.

HE present-day demands for and cooking of the candy to the final lot is automatically elongated and confections of all varieties, packing of the filled display boxes, formed to size as it is fed to this machine which also cuts off and wraps, Following the blending, cooking from a continuous roll of printed 200 pieces per minute. The individually wrapped pieces fall on a small return belt conveyor which carries them to the cartoning machine. There are four such production lines, that is to say, four wrapping machines supply four cartoning machines.

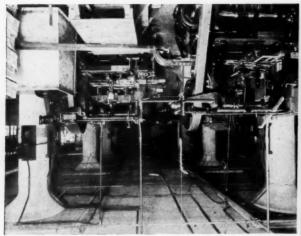
Clay coated, printed cartons are fed from a reservoir on each cartoning machine and opened to permit the insertion in each one of five pieces of the wrapped butter scotch or mint toffee. Following the completion of this operation, both ends of the carton are simultaneously tucked in and the completed packages travel to a packing table where girls place them in plain boxes or display containers. The latter contain 24 of the filled cartons and are decorated as shown in an accompanying illustra-14th Ave., at 36th St., Brooklyn, both-each batch, weighing about cipally to the local trade and that







Side view of machines for cartoning butter scotch



End view of two of the cartoning machines

Automatically tying the display cartons

tainers are then tied once around in automatic tying machines and are ready for placement in corrugated cases for shipment.

Car cards which carry out the same decorative features and plaid color scheme that appear on the display container and the individual cartons are used.

This plant offers an interesting example of modern packaging methods as applied to two kinds of wholesome confections which have been and will continue to be popular.

EQUIPMENT USED

Wrapping machines: Ideal Wrapping Machine Co.

Cartoning machines: R. A. Jones & Co. Tying machines: National Bundle Tyer

finds the seal of approval of Good Housekeeping Institute. In fact, Patapar is used regularly in the institute as a part of its kitchen equipment. Seals of approval have also been awarded by The Herald Tribune Institute of New York (where Patapar is purchased regularly for cookery needs) and from The Priscilla Proving Plant, the home-testing department of Modern Priscilla.

The Paterson executives are merchandizing Patapar through regular wholesale paper houses, with whom they already are in close touch through their sales of vegetable parchment for commercial wrapping of moist goods. Retail channels will be chain food stores, groceries, meat markets, stationery, hardware and department stores. The display carton has been designed in such an attractive manner that it will fit into the counter schemes of all these various types of retail outlets.

Advertising plans for reaching the consumer have developed rapidly. A campaign to reach the metropolitan New York market has already brought good results from schedules in the Herald-Tribune, the New York Times and the Daily News. In October the field will be broadened to a national scope through the opening of a campaign in Good Housekeeping. It is expected that other women's magazines will follow-with a schedule also anticipated in The Saturday Evening Post. The handling of this campaign is by Platt-Forbes, Inc.,

Cookery Parchment in a Display Container

ITHERTO the secrets of French again without losing its peculiar qualfined to Parisian chefs. Housewives boiled without changing its composihave relished and envied the succu- tion in the slightest. Each Patapar lent flavors of dishes prepared en envelope contains ten large sheets and caserole, but they have never been sells for 35 cents. It has been estioffered an easy, effective way to get the same results.

Now, however, the Paterson Parchment Paper Co. has initiated a movement that will mean more flavorful meals in many an American home. They are offering Patapar cookery parchment to the public, dressed up in a handsome new envelope, and distributed in a display carton. Both the envelope and the display carton are produced in a color scheme of light green and turquoise blue-with panels of white-giving a charmingly cool, sanitary appearance to the product. The display carton is the product of the Robert Gair Co.

The unique thing about Patapar is the fact that it can be used again and

cooking have been largely con- ities. It can be washed and even



Carton for displaying parchment

mated that each sheet is used by the housewife an average of ten times, which brings its cost per meal down to less than one half a cent.

On each envelope the housewife New York agency.

Advances in Shipping Packages

Use of Corrugated Fibre Board for Interior Linings and Transportation Cases Successfully Adopted by Various Manufacturers, Reducing Cost of Containers and Elimination of Breakage, Lowering Packing Costs and Effecting Other Economies

By DUNCAN CASSIDY

era which saw such big advances in mechanics and the transportation of products there was no improvement in containers for shipping goods. Integration of industry, mass production and transportation by rail were far advanced at a time when merchandise was being packed in containers little better than employed by early pioneers. Even successful experimentation with the airplane had become a fact before manufacturers and dealers sought generally and systematically to eliminate losses and waste caused by antiquated packaging methods.

The first step in developing the modern shipping package was made in 1871, when corrugated fibre board was patented. The new product was intended as a substitute for excelsior. straw and similar materials used as interior packing in the containers of the period. A second step came with discovery that the corrugation would not flatten under ordinary pressure if a facing was glued to the corrugated board.

Boxes for express shipments were first made of the new material. Experiments were conducted meanwhile by a pioneer company to develop a container staunch enough to stand up under freight handling. In 1904 the first freight shipments were made in corrugated containers produced by this company. Doubt of railroad officials as to the staunchness of the container was removed two years later when it was officially accepted for freight purposes.

HE modern shipping case, therefore, has been evolved in little more than 25 years. The up-to-date, highly specialized package is the result of constant experimentation and study by box engineering experts. Finding new uses for corrugated fibre

ing the past quarter century so that in spite of its late conception the scientific shipping case is now quite abreast of other important advances recorded by industry. Unobtrusively and efficiently the modern shipping case makes its valuable contribution to the swift, safe and economical distribution of the multitude of products which make up the total of civilized comfort.

Although a cereal product was first shipped in corrugated containers, the manufacturers of glassware, who had suffered great losses and inconvenience through use of the old boxes and barrels, soon turned to corrugated containers for relief. Doubt as to the staunchness of corrugated fibre still lingered in places, but the glass men were willing to experiment with anything which promised some improvement over the old system of packing. Though crude as compared with more recent containers, the early corrugated boxes for glassware materially reduced breakage. Later developments in the specially engineered package with its interior braces, pads and cushions quite eliminated this source of loss. Through reduction in the initial cost of containers, elimination of breakage, lowered packing costs, and other economies effected by adoption of corrugated shipping cases, many manufacturers of glassware were enabled to secure a margin of profit which assured their business

The drug and chemical houses, large users of corrugated packages, received noteworthy benefits. One company reported a cut of 30 per cent in packing costs. Manufacturing chemists, like the glassware makers, found that corrugated packages largely contributed to their business success.

NTIL comparatively late in the has been their especial province dur-receiver from adoption of corrugated packages was reduced freight costs. In many shipments the old barrels and boxes weighed more than their contents. A second advantage was that after receipt the trouble and labor of handling were considerably reduced, and highly inflammable interior packing materials were abolished. Since each corrugated package contained a specified number of articles or quantity of merchandise, receipts could be checked without opening the shipments. One or more boxes could be opened and the remainder stored in their original, dustproof, insulated containers.

> HE largest manufacturers of proprietary remedies have used corrugated containers for many years. Large numbers of their products are put up in bottles whose shapes cause them to be extremely breakable. Boxes for such shipments are often constructed of double strength material. The carefully designed inner packing varies with the contents. There are cushioned individual cartons, resilient partitions, pads and linings which protect each bottle, box and jar from damage. So exactly constructed are the partitions and containers that not one in 100,000 will show the least defect or variation, and the contents are prevented from rattling or shifting the smallest fraction of an inch.

Many products included in the miscellaneous chemical classes contain certain oils, acids and other penetrant substances. With these there is need for extra breakage prevention which is supplied by double strength cushioned containers. These containers afford extra safe packing for inflammables.

Illuminating glassware is the most fragile commodity with which the The chief advantage derived by the distributor has to deal. It used to be

shipped in barrels or heavy wooden boxes stuffed with hay. It has to be packed and unpacked very carefully and afterward there was great danger of breakage on the dealers' shelves. The modern glassware box carries a single large globe or a standardized number of smaller ones suspended by means of interior braces so that no piece of ware comes within an inch of any surface of the container. Breakage is eliminated. On arrival of the shipment the purchaser takes a sample from a single box, counts the packages, stores them without unpacking, and may even deliver the goods to his customers in the original containers without a moment's effort or delay.

Corrugated fibre proved to be peculiarly adapted to packaging the varied dainty and frail objects which find favor as gifts. Added to the all important elements of safety and economy was a touch of elegance very desirable in the packaging of articles which are so often required for special occasions.

Single volumes, small sets of books, stationery and stationery cabinets, and every other item handled by booksellers and stationers are provided with specially designed corrugated packages that insure economy, convenience in handling and protection in transit.

EVELOPMENT of the "unit" package, where an article or a specified number of articles are shipped in a single package, is one of the conspicuous advances in modern packaging. Application of the principle to electrical appliances is especially noteworthy. Such appliances now form a large part of retail dealers' sales which makes the problem of their safe and convenient packing increasingly important.

Vacuum cleaners, for example, formerly were shipped unassembled. Two or three heads were shipped in one box, and a half-dozen handles in another, while a third contained a miscellaneous lot of parts and accessories. The dealer was obliged to hunt out, assort and count these parts before the invoice could be verified. Then the machines were tity compared with the amount of 1928, at the Biltmore Hotel, New assembled and necessary adjustments timber which would be necessary for York City.

were made. It was a tedious and time-wasting process. After that the assembled machine stood on the floor of the show room or in dusty store rooms until delivered to customers.

This system had the effect of restricting dealers' orders and occupied time which should have been devoted to sales effort. Observant manufacturers remedied the situation by taking advantage of the development of the specially engineered package, adapted to all kinds of electrical appliances which might be shipped safely in set-up form, singly or in standardized quantities. Increase in good will and orders was the consequence of the new system.

Conquest of industrial fields where the articles to be packed are of high specific gravity makes an interesting chapter in industrial development. When this country entered the World War the Food Administration, finding a shortage of lumber due to increased war demands, wished to adopt for Government canned foods containers which would help conserve the lumber supply. At a conference of manufacturers and officials of the Food Administration the Hinde & Dauch Paper Co., Sandusky, Ohio, submitted specifications for corrugated containers which were adopted. Other manufacturers of corrugated containers were instructed to follow the specifications and to identify all canned food containers intended for shipping foods to the military forces, with a red crescent. These containers for canned foods had been perfected prior to the war by the Hinde & Dauch Paper Company which was thus enabled to be of service to the nation in the war crisis.

HE conservation feature of corrugated fibre becomes increasingly important as the nation's timber resources are depleted. Corrugated board is composed of straw and wood fibre, most of which would be wasted unless so used. None of the wood pulp utilized comes from straight timber that could be turned into building materials, and all of the wood pulp consumed in the entire fibre box industry is trifling in quanthe manufacture of a comparable number of wood boxes.

Containers for such heavy products as paints, varnishes and lacquers also have been developed. The first paint concern to adopt corrugated containers did so at the suggestion of an employee in the purchasing department. The house organ of the company, a nationally known organization, reported that \$90,000 was saved the first year through use of the containers. The employee who suggested adopting them was given a financial reward and promoted.

The glimpses given here of modern packages and the part they play in reducing distribution costs indicate their importance in the industrial world. If they were suddenly withdrawn from commerce the consumer would be immediately apprised of the event by a sharp increase in the cost of merchandise of all kinds, and modern distribution systems would be seriously crippled.

Y/. C. Ritchie & Co., Chicago, Ill., have purchased the Miller Fibre Products Co., which is now being operated as the Miller Division of W. C. Ritchie & Co. The Green Street plant is now being altered so that there will be 100,000 sq. ft. of space available for the manufacture of fibre cans, including convolute and spiral, with both tin and paper ends; spice cans; battery caps, labeled and unlabeled; mailing tubes, etc. the South Chicago plant, where alterations for 100,000 sq. ft. of space are also being made, set-up boxes including face powder, jewelry, pen and pencil will be produced.

HE Milwaukee Printing Co. and Milprint Products Corp. have appointed J. A. Cormack as Director. Mr. Cormack has been associated with the advertising, merchandising and sales promotion field for the past twelve years, his most recent connection being in the advertising department of Eline's, Inc.

HE National Association of Chewing Gum Manufacturers held their annual meeting on June 8,

Distinctive Oyster Packaging

Gandy's Oyster House Adopts Sturdy Container That Overcomes Disadvantages of Old Style Paperweight Bucket Package and Serves to Identify Establishment

By JOHN WINTERS FLEMING

HE most efficient, effective of the country's most famous sea food moisture-proof. restaurants and fish markets, Gandy's Buffalo, N. Y.

restaurant and retail sea food mart, and one of the main reasons was the

way of packaging oysters has pearing, absolutely sanitary, conbeen a puzzler for years for one veniently shaped, and dirt-, dust- and

Lastly, the package must give full Oyster House, 386-388 Pearl St., measure. Mr. Gandy was dissatisfied with the old light-weight, thin Leroy S. Gandy, president of the cardboard, oyster bucket packages had definite ideas of what he wanted "score lines" inside the package to in the way of an oyster package. show the height to which the package

The package must be clean ap-lessly he thought, for he saw no reason why he couldn't get a "bottom-proof" package for his

> Then there was nothing at all attractive or distinctive about the bucket-type containers. They were drab, colorless, ambiguous affairs. One looked just like another although they came from two different stores. Mr. Gandy wanted a package that would identify his place. With these ideas in mind a new package was created that filled the bill.

ODAY the Gandy oyster package I is as near a thing of beauty as an oyster package can be and at the same time it is the last word in practical, workable efficiency and effectiveness, both in appearance and in

The present oyster packages cost more than the old style bucket packages but Mr. Gandy rightly figures that they save him far more money in the long run than it costs him in the initial instance of purchase. He is no longer called upon to make good on oyster orders that fell down when the bottoms fell through. He has a distinctive container that advertises his market and restaurant with every oyster package sale.

The package now in use at "Gandy's," as the restaurant and fresh sea food mart is popularly nicknamed in Buffalo, comes in two sizes, pint and quart. They are made of lightweight but sturdy cardboard, circular in shape and the bottoms and tops are double-crimped. This double-crimping prevents the bottoms from dropping out. The quart container measures seven and a quarter inches from top to bottom and is three and a half inches in diameter. The pint package is four inches in height and the same measure in diameter.

(Continued on page 43)



Colorful, weather-proofed oyster carton used by Gandy's Oyster House, Buffalo, N. Y.

ideals into actual packages proved a stumbling block at the beginning. As Mr. Gandy analyzed the problem, there were certain definite goals in oyster packaging to be achieved.

The package must be colorful, attractive, and distinctive, instantly the firm when the package

The package must be strong, durable, and so constructed that the tops stay on and the bottoms don't drop through.

How to materialize these mental should be filled for pint orders and for quart measure. The psychological effect on the buyer of an oyster package that is not filled to the brim but just filled to the "pint line" or "quart marker" is negative and

Other flaws crept into the old latter to an extent that identifies style of paperweight oyster bucket. For one thing, Mr. Gandy began receiving complaints, many of them, that the bottoms of the packages or buckets dropped out. Mr. Gandy always duplicated the order in such cases but this cost money-need(Continued from page 27)

Inner wrappings for chocolate packers are shown in figures 3, 4 and 5. These fall roughly into two groups, i. e., the circular croquette type and the rectangular type.

Figure 3 shows two kinds of croquette paper wrappings, the top drawing being the more popular of the two and designed to take large single croquettes, while the lower one, which is slightly larger, is sufficient in size for two somewhat smaller croquettes to be wrapped together in it.

These diagrams are practically selfexplanatory, the circles in each case representing the base and the top margin of the croquette, respectively. The dimensional data are slightly different, these being as follows:

Large Single Croquette. Total length and total width, 21/4 in.; thickness of single croquette, 1/4 in.; weight of wrapping uncharged, under one-fourth of an ounce.

Croquette Couple Model. Total length and total width, $2^{1/2}$ in.; thickness of the pair of croquettes, ⁵/₈ in.; total weight of wrapping uncharged, under one-fourth of an ounce. Silver paper (lead foil) is used as the actual wrapping material.

Figure 4 shows a larger type of inner wrapping, this kind being used for rather thick bars of chocolate cream. Bends are made of the usual type along the base lines and top lines of the chocolate, the actual size of the tablet being shown in the drawing. The corners of each end are then bent over and again bent on to the top of the chocolate. The dimensions of this type of wrapping are as follows:

Total length, 49/10 in.; total width, 4 in. measured along the lines ABand AC, respectively; thickness of chocolate cream, 1/2 in.; weight of wrapping uncharged, under onefourth of an ounce.

Figure 5 shows an inner wrapping of a somewhat similar type, but in this case the chocolate consists of a bar of plain sweetmeat half the thickness of the previous one. The actual size of the base and top of this tablet, bar, or slab is shown in the drawing, and bends are again made along both base line and top line, the corners being folded over in a similar manner to that mentioned in the previous

instance. Dimensional details are as follows: Total length measured along AB, $4^3/_5$ in.; total width measured along AC, 4 in.; thickness of chocolate, 1/4 in.; total weight of wrapping uncharged, under one-fourth of an

The type of paper used for the models illustrated in Figures 4 and 5 is thin greaseproof material. It carries no print on either side as the wrapped chocolates are slipped into thin card cartons with open ends prior

New Plant for Consolidated

THE new four-story, reinforced I steel, concrete and brick building, 400 ft. long and 120 ft. wide, which is being built by Consolidated Paper Co., Monroe, Mich., will be ready about Sept. 1. This building will house the folding paper box plant of this company and will greatly increase their facilities for service to manufacturers who are making use of folding paper cartons.

Court Rules on Packages

THE Eastern District Court of New York recently held that Gardiner-Lucas Licorice Co., Inc., was not liable in an action for unfair competition based on the alleged simulation of a package used by the Ouaker City Chocolate and Confectionery Co., Inc., plaintiff.

The defendant pictured, on its package, licorice pellets contained therein, this representation being dissimilar to that on the plaintiff's package, and the pellets being considerably smaller than those pictured by the plaintiff.

The defendant's package, it was also found, was distinguished by a bright red band or streamer containing in the center the printed name of the product.

The court held that the packages were not confusingly similar, and that the defendant has the right to picture its product on its package which it has distinguished by printing on it the name of the product.

Liners for Metal Caps*

THE liner of a metal cap which is the streets or old newsprint. used to seal pharmaceuticals, chemicals and toilet preparations usually consists of two materials: a resilient material and an impervious material. Both bave an important work to perform in effecting the seal of a jar or bottle. One to absorb minor imperfections of glass finish, the other to resist action of product.

Two types of resilient material are commonly used, compo cork and pulp board. Compo cork consists of small grains of cork which are held together with a binder. A cork composition is superior to the natural product for liner purposes because the method of manufacture eliminates air holes which are found even in the finest grades of cork. In addition to this, it is more resilient because the grain of the cork is turned at all angles. Pulp board is made of wood There are several grades. Some are made from virgin spruce wood, others from reclaimed paper of

* Reprinted from the July, 1928, issue of the Phoenix Flame, published by The Phoenix-Hermetic

superior pulp board is easily recognized by its clean, white appearance, freedom from blemishes and pliability. Only this class of material will give an effective and sanitary seal. Compo cork, because of its greater resilience, is used in screw caps, 33 mm. or less in diameter. Pulp board is used in the larger sizes. Compo cork and pulp board are sometimes used alone to seal some of the simpler forms of products. When this is done, a surface film of paraffin is used to make them impervious to the action of the product.

FOUR types of impervious materials are commonly usedwax paper, oil paper, black paper and tin-foil. These materials have been found satisfactory for practically every chemical product sealed in bottles and jars. The proper impervious material to use may be determined by a series of simple tests. These tests may be conducted by the manufacturing chemist in his own office or

laboratory. ally time may be saved by consultametal caps. Records of tests on manufacturing conditions. basic products are kept on file for reference.

During the last few years there has been some experiment and considerable talk about a universal liner—that is, a liner which could be used to seal all types of products, acid or alkaline, liquid or paste. Such a liner would be welcomed by every progressive cap manufacturer and quickly adopted. It would simplify a now more or less complicated problem. But no one material has been discovered which will effectively serve the purpose of both resilient and impervious material. And no one impervious material has been discovered which will effectively seal every product under every packaging condition. though such a material, or combination of materials, were discovered it would most likely be too expensive for universal use-many products now being sealed with the simplest and least expensive forms of liners.

HE resilient and impervious materials are seldom adhered in the smaller sizes of caps as there is sufficient spring in the impervious materials, when of small diameter, to keep them in place. But in sizes 35 mm. and larger in diameter, it is advisable to make them as nearly one The adhesive piece as possible. which is used to do this is of more than casual importance. It should not be a glue of the animal or vegetable variety. Both are odorous and have the tendency to penetrate the fibres of the paper. If odorous, it may contaminate the product. If it penetrates the fibres of the paper it may make the liner susceptible to the action of the product.

The safe delivery of a chemical product to the consumer, and the good name of the manufacturing chemist who makes it, frequently rests upon this thin disc of cord or board and paper. Therefore, it cannot be selected too carefully. Not

Thirty days is usually only should it be capable of resisting considered sufficient time to deter- the chemical action of the product it mine the proper liner, although seals, but because it comes in actual longer tests are recommended when contact with the product for long it is possible to conduct them. Usu- months at a time, it should be made of the cleanest raw materials and tion with a reliable manufacturer of combined under the most hygienic

Testing Paper Properties

meeting of the paper-testing committee of the Technical Association of the Pulp and Paper Industry was recently held at the Bureau of Standards, Washington, D. C. Plans were made for further development of official association methods. The committee has so far completed 26 paper-testing methods which cover the common physical and chemical tests. The new work planned consists of methods dealing with resistance to liquids, such as water-proofness, degree of sizing and grease resistance, and various chemical methods.

The procedure for development and adoption of these official association methods, and their form, are practically the same as those of the American Society for Testing Materials.

Convenient Carry-all Packages

Decorative Paper-Covered Containers Provide Colorful Carriers or Receptacles for Various Articles

HERE has been increasing popularity in the use of light, colorful and serviceable containers that can be adopted for shopping and other purposes where permanency in the bag or box is not required. Such containers can be secured at small

well-known "Boston" bag. Ribbons which extend around the lower part of the bag and are held in place by slits in the sides form a convenient handle.

The hat container is also a onepiece, paper-covered folding box with a single fold for the cover. The two side pieces on the top or cover provide rigid support and when closed the latter is held in place by a ribbon that passes entirely around the box. This type of closure permits easy opening of the top as it is necessary only to lift the cover by means of the small tab on one edge.



Courtesy, Pinco Papers, Inc. Handy, paper-covered shopping bag

cost; often they are supplied gratis to the housewife by the various stores.

Among the different types obtainable for such purposes, the two packages illustrated offer good examples of one-piece, paper-covered containers. In the bag container shown, scoring permits the folding of the top in such a way that when the tuck-in closure is made the container is not unlike the



Courtesy, Pinco Papers, Inc. Hat box with single-hinge cover. Paper used is of shaded blue background with gold scroll design



Small Unit Packages

66 HOW, are food specialty manufacturers going to adjust the sizes of packages they sell to 5 and 10 cent grocery stores to the general program for the standardization of containers?" queries a radio broadcaster recently.

This question, it seems to us, is not a matter of ways and means but rather one of meeting supply and demand. If a market exists or offers a reasonable potentiality for the sale of smaller packages, there is no doubt but that that demand will be met; in fact, such is already the case with many commodities that are now distributed in smaller sizes through the chain stores.

We must take into account the trend of modern day buying—that which dictates small purchases, or rather the purchase of small portions. Conservation during the war years started the idea of hand-to-mouth buying, which has since been encouraged by present modes of apartment house and apartment hotel living in metropolitan centers as well as by the preferences on the part of nominal wage earners for small quantity purchases.

It is true that every time an article or commodity is repacked for sale in smaller units the cost must increase and actually, from the standpoint of the retailer, it requires as much service to sell a 5-cent and 10-cent article as one which retails for 25 cents, 50 cents or a dollar. But this handicap, if such it be, has been overcome or absorbed by increased unit sales or by the adoption of certain self-service systems. With sales to justify a given volume of packages, we doubt whether manufacturer or retailer will raise the question asked in the first paragraph. And, judging from the increasing growth of chain stores, it would seem that there is a good foundation for the belief that such sales will continue, at least until the buying habits of the public undergo a change.

The demand for smaller packages has already, in many cases, been met by the adoption of higher speed machinery for filling, cartoning, labeling and other operations of packaging, thus taking care of the supply of materials necessary to meet requirements and at the same time keeping packaging costs within economical figures. It is certain that a manufacturer who operates on sound business principles does not hesitate to change his production or merchandising methods if they prove inefficient.

Standardization, as we understand it, and as applied to packages, means a reduction to the least number of possible sizes. This does not necessarily mean that to arrive at a plan or scheme of standardization for any given group of packages we must consider only those sizes which now exist. True, it does or should eliminate those that are unnecessary, but it may adopt certain

sizes that will effect a compromise between a given range of sizes. On this basis there should be no condemnation of the small unit package for, obviously, the manufacturer of packaged merchandise will not overlook an opportunity to sell to an established or preferential market. There will be a consequent decrease in the undersirable sizes that will automatically remove them from the retailers' shelves.

Packages as Loud Speakers

SHOW windows have been spoken of as the "loud speakers of stores." Such a designation, if we accept this comparison with the radio, may call for some elaboration or explanation. Obviously a loud speaker may be objectionable just as often as it is pleasing; that is, it may, by the delivery of well-modulated tones, be a desirable adjunct to the radio set, whereas if it emits harsh, discordant and indistinct sounds it becomes decidedly objectionable. One attracts and the other repels. Just so it is with show or display windows.

It has been estimated that there are about 80,000 display windows in the United States, covering establishments that are engaged in the distribution of packaged merchandise. It is reasonable to suppose that the greater number of these establishments make use of actual or dummy packages or the reproduction of packages in specially prepared displays in the decoration of their windows. The manufacturer who supplies packages and display material to the retailer of his goods should therefore take as much interest in the selection of his package design and display material as he does in the manufacture of his product. Too many manufacturers are consulting their own thoughts and particular taste in art work and do not pay sufficient attention to the effect of design of packages and displays on the retailer and the consumer or passerby, for whom the "loud speaker" or show window is intended.

Typography Applied to Packages

RECENTLY we saw an advertisement that we read through a second time. It was an advertisement directed particularly toward advertisers but with certain substitutions it can well be applied to users of packages as well to designers of packages. It reads like this:

"Modern typography does not consist of freak types and bizarre typographic stunts. Ordinary printers rely on new types for distinctive effects. Capable advertising typographers know that distinctive displays can be secured with any good face of type—and while using new types do not *rely* on them. Even good type improperly used will make a messy-looking advertisement.

"Good advertising will always be readable. And good advertising typographers can usually make good copy distinctive—modern if you like—without sacrifice of readability. Here we employ the most modern type equipment to further the purpose of good advertising—to get attention, to be read, to be understood, to make the desired impression."

Packaging Sea Food

In this issue we are presenting two articles which deal with the packaging of sea food. While one of these, "Distinctive Oyster Packaging," relates specifically to the design of the packages and considers only retail distribution, the other, "Packaging Jumps Fish Sales," details the methods in packaging as well as the wrappings used, both articles indicate definite expansion in the application of packaging to a field that has heretofore made little use of this method of distribution and merchandising.

Through the acceptance of packaging by "one of the oldest of the major primary industries," it has been possible to make fresh sea food available to those at inland points and this has resulted in greater distribution of such products. And, in common with other commodities that have adopted containers and wrappings, fresh sea food has entered the class of trade-marked products, thus establishing definite brands in the minds of consumers.

At least one company on the Pacific Coast has progressed far in the work of packaging fish—the San Juan Fishing & Packing Co., Seattle, Wash.—and here the Ottesen process is used to freeze halibut, salmon and sablefish which are afterward cut into steaks and packaged by approved methods.

Unquestionably such practices will be extended to companies supplying sea foods who are not now using wrappings or packages. Not only does this means of distribution enable a better establishment of a producer's market within larger areas but, from a dealer's standpoint, eliminates waste from handling fish in bulk, reduces the space ordinarily required for handling and dressing and opens up new outlets for sales.

Synchronizing the Package

DURING the late war and directly following it we heard much of waste in industry, and there is still considerable study being devoted to certain problems that, once solved, can effect substantial economies in the production scheme of things. Today, however, the question is not so much how to produce goods as how to distribute them and so take care of an output that cannot economically remain stagnant. New markets must be found and present outlets must be stimulated. A rather bromidic series of statements, to be sure, but without some significance to the manufacturer of packaged commodities.

Opinions to the contrary notwithstanding, advertising in its several forms has performed outstanding work in the distribution and merchandising of products, raw and manufactured. Characterized as an inexact

science, it has accomplished far more than its keenest champions expected and is recognized as a most potent force in sales work today. Greater sums, so we are told, are being spent for advertising than ever before, and while it may be said that we are a nation of spenders it is our general opinion that we usually get our money's worth.

Viewing the advertising that is being done by nationally known concerns this is, for the most part, well done. Newspaper, magazine, bill board, poster, direct mail, dealer helps and other forms of advertising are excellently prepared, reflect credit on the various agencies employed in its preparation and effectively perform that part of the sales job for which each campaign is designed.

But how about the packages? Do they measure up to the other means that are being used to promote the distribution of your products? Do they synchronize with the other sales helps in which you are investing?

Too frequently an otherwise well-planned and well-executed advertisement suffers from the handicap of an indifferent or poorly designed package that is reproduced as a part of the layout. Actually it would have been better in many cases had the package been left out.

Recently we read a statement made by an advertising agency executive, "No agency can be of maximum help to its client if it limits its job to copy or to any other single phase of advertising. We believe the agency should take a part in everything pertaining to the presentation of the product to the public from package to printed matter." With this statement we are in hearty accord and particularly insofar as it concerns packages. When it is realized that the package is the most frequent reminder to actual and prospective customers of a manufacturer's product its importance cannot be slighted.

A package that is poorly designed becomes the weakest link in a manufacturer's distribution chain whereas one that presents a neat appearance offers a sound foundation for his entire promotional plan.

Packaging Hardware

HESITANCY on the part of hardware manufacturers to adopt the use of colorful and attractive packages, as brought out in Mr. Conder's article, "Boosting Hardware Sales," besides being attributed to the fact that sales of many items in the hardware field are based more on a demand than on a stimulated desire to purchase, can also be accounted for by the fact that the variety of hardware products changes less from year to year than the average retail stock. Tools and small hardware are placed in boxes or containers but these, generally speaking, carry little in the way of decoration and, lacking the elements of the attractive package, there is little incentive to place such boxes in display containers.

It would seem that an excellent opportunity exists for greater stimulation in sales, particularly among certain hardware items that are now being distributed through chain stores, by the use of packages that demand attention.

Slanting Display Containers

Boxes Used for Show Purposes Embody Simplicity and Convenience in Assembly and Offer the Maximum of Attention Value

assembly for packing. Second, the dealer's cooperation in getting him to use the display container for its purpose. This is accomplished by the suggestion for display that the



The display card is permanent

unit makes in its appearance, the ease with which the dealer may set up the container for display and, lastly, its permanency in appearance and neatness on the dealer's counter.

Third, the cost of the display unit must be in proportion to the advertising for display value received.

HERE are three major factors to Where a manufacturer of packaged consider in arriving at a valuation products is replacing a carrier of of a counter display. First, the con- merchandising with a combination tainer must be simple and rapid in carrier and display unit, it is only fair to place any difference between the price of the latter and that of the carrier against advertising. Outdoor, magazine, newspaper or other forms of advertising tied up at the point of sale with counter display container advertising is decidedly to the advantage of the manufacturer of packaged merchandise.

> In each of the three displays illustrated-Cremo, Blackstone and Le Page's containers-it is necessary only that the dealer pull out the easel and display card and push the unit backward into its tilted display position so that the face and display card of the container are tilted backward at a most readable angle. The display card is locked into position and cannot fall forward or backward. The merchandise is staggered in rows, the general appearance of which invites closer inspection. The permanency of each display and the fact that the advertising material on the display card is readable at all times and is constantly delivering the message of the goods insure a high return in display value on the investment that is made.



Packages shown at an incline

The Heide's licorice pastille box when set up as shown obtains its display through the use of inclined planes which fold under in such a way as to slant the unit when it is placed on the counter. The display card is also permanently locked at the proper angle for easy reading. As received by the dealer the display forms a complete container with the aforementioned planes making the cover.

All of the display containers shown are made under the Darragh patents and manufactured by the Rochester Folding Box Co.

HE Sutherland Paper Co. and I Standard Paper Co. have consolidated, the new corporation being known as the Sutherland Paper Co. Officers of the Sutherland Paper Co. will remain the same.







Staggered rows invite inspection

Distinctive Oyster Packaging

(Continued from page 37)

The cartons are cream colored and are rendered striking and colorful by the judicious use of green and orange. The designs on the packages are the same for both sizes. One side of the package proclaims in large green lettering "Gandy's for Sea Foods." In smaller green lettering appears "Market and Restaurant, 386-388 Pearl St., Buffalo." On the lower right portion of this side appears an old "salt" with his hands on the steering wheel of a boat. In the center of this side is an orange-colored lobster that gives the impression of being a natural red lobster color due to its blending with the green- and cream-colored surroundings.

On the top of the other side of each package in large green script is "Gandy's." Right beneath this script, in even larger lettering, colored orange, is the word "Oysters." Below this in small green lettering a statement says: "Daily Shipments Direct from the Seashore." Below this is another orange-colored statement, "Absolutely Every Oyster Opened Fresh from Shell." At the bottom on this side the address and telephone number of Gandy's is printed in green. These alternate strips of orange and green lettering on the cream-colored background of the package achieves all that could be desired in distinctive attraction in an oyster package.

The tops fit so closely on these packages that seams are made in the sides to make them easy to open from the side if the top resists coming off.

There are no "score lines" on or in these new packages. In filling an order the salesman fills the pint or quart container, as the case may be, right up to the top and in this way the favorable impression of full measure is given the customer. No customer ever receives a quart or pint package of oysters at Gandy's and finds the package filled to within a fraction of an inch of the topthey are filled brim full.

when he first received them. He put custom and adopted a short crate.

one in his pocket in Buffalo and left and used them about the house for for Jamestown on a business trip. At the end of his 100-mile journey he found the package in perfect condition despite the jarring and bumping of an 100-mile auto trip. He says that he has received many favorable comments on his packages, perhaps the most novel one being from a woman who said that she to be known as an identification tag liked them so much that she cleaned for the restaurant and fresh sea them after taking the ovsters out food market.

containers of various domestic sorts.

That's how Leroy S. Gandy and the Seal-Right Co. solved the riddle of the oyster package. Today Gandy has an attractive, colorful, sanitary, and sturdy package that fills up to the brim. And, the package is is distinctively Gandy's-it has come

Washington Correspondence

PROBABLY no provision of the "Each year it is necessary for the Federal Food and Drug Act Food, Drug, and Insecticide Admore intimately concerns the farmer than the "net weight" amendment, according to a statement made here by officials of the United States Department of Agriculture.

"This defines an article of food in package form as misbranded if the quantity of the contents be not plainly and conspicuously marked on the outside of the package in terms of weight, measure and numerical count.

"Space will not permit a tabulation of the various foods that may be marked according to weight or measure or numerical count. Suffice it to say these methods cannot be used indiscriminately. A plain and conspicuous declaration of the quantity of contents does not mean merely that the size of the type shall be large enough to be readily observed. What is more important is that the terms used shall be readily understandable by the purchaser and adaptable to the product in question.

"For example, the public is accustomed to buying strawberries by the quart, and, while a declaration of the number of berries in the basket might be technically correct, it might, at the same time be misleading, particularly if the packer had used a short quart basket. Likewise dealers in oranges for years have been buying by the number of oranges in the crate. This practice has become standardized and a statement in terms of weight alone will not satisfy the terms of the law because it might very well be mis-Mr. Gandy tested the packages leading if the shipper departed from

ministration to send out hundreds of letters and many formal citation notices to shippers of fruits and vegetables who fail altogether to brand their products or they label them in an unsatisfactory manner.

"Foods, like other commodities, must stand or fall on their own merit. No honest man will hesitate one moment to tell the public how much food he is getting for his money and to this end Congress has seen fit to provide a way for setting forth this information."

FFICIALS of the United States Department of Agriculture, who have given the matter much thought, say that tea is often ruined by being packed in improper containers.

"All housewives, especially those living in the rural districts where large-scale buying of staple groceries is more common than among those who live just around the corner from a handy retail store are interested in getting tea, as well as coffee and other foods that deteriorate readily, put in the kind of package that will preserve the original flavor and good quality of the product. The diversity found in such packages led the tea control-laboratory of the Food, Drug, and Insecticide Administration to undertake a two-year investigation of the keeping qualities of more than 100 types or sub-types. A series of five quarter-pound packages of each type of containers were filled by the tea packers cooperating in the test with a medium quality of black tea and medium quality

green tea, originally bought by the government and forwarded to the packers in well-seasoned fricton top containers. Each five-package unit, as soon as it was received in the laboratory, was placed under storage conditions representative of those that obtain in a retail grocery store or in the pantry of a private home. The same tea packed in a quarter-pound slip-cover tin container served as a check throughout the test. Every six months the tea in one package of each type is compared with that in the corresponding check package by an expert tea taster and the results are recorded.

"Although the two years' test are not quite up, the results so far obtained show conclusively that much of the tea sold in the United States is ruined by lack of care and packing. Obviously, the paper bags or pasteboard cartons, which may preserve tea satisfactorily in wagon routes or in chain stores where there is a quick turnover, are not the thing for tea held in shelves in retail stores or in homes for long periods or shipped for long distances, especially from one climate to another.

"Ascertaining the best means of preserving foods as determined by moisture tests of the products before and after storage and chemical analysis of the container material has led to an improvement in the packaging of food products, but it is believed that the methods employed in the test now under way will be of great value to packers and buyers. The actual depreciation as indicated by the reduction in quality of the tea packed in the various containers will show definitely the value of each type of package. When these results are made public each packer will be in a position to select the package best suited to his particular needs and the housewile can best avoid buying tea in packages that will not stand up well under storage conditions in her home.

"The Department's investigation has shown that tea, coffee, and similar products can be kept in practically perfect condition for indefinite periods of time if certain methods of packing are adopted. Based on the results so far obtained, much constructive advice has been given to packers of tea and other food products. Even before the final reports are published, therefore, the consuming public will have profited by the Department's findings."

THE package fish trade is assuming large proportions, according to a recent statement from the Department of Commerce, which shows this business to have reached three hundred million pounds.

"Trade in package fish, according

to the statement, started only seven years ago in Boston, has grown to startling proportions the last few years in the United States. According to a Bureau of Fisheries circular, over 46,000,000 pounds of fish went into the package fish trade in 1926 and over 75,000,000 pounds last year. Package fish is prepared in the United States at production points and packed, whence it is shipped to consumption centers. Various types of containers, with or without ice, are used."

The Turret

BECAUSE a man buys something contract is that the manufacturer from you is no reason why the will replace a broken or defective two cannot become exceedingly true and good friends. Most of us would a great deal rather lose some men's business than their friendship.

It seems to me that a great many fine friendships are created because of the discovery, through business deals, of the superlative qualities that buyer and seller find in each other. Many a Damon and Pythias have met and started a friendship during a business deal and all the floods of adversity have been unable to rend it asunder.

If that friendship is based on the respect for each other's rights-on the fundamental that only equality of demand must govern their business relations, that no unjust request can be asked—then what better friendship is there possible?

If, in truth, more of this existed between business men in whatever capacity they serve, there is no doubt that all would be better off because or, may I say, in spite of it.

Wasn't it a tough little urchin in one of the poorer districts who, when asked to define the word friend, said, "It's a guy you know all about and like anyway."

Let's follow the urchin!

A FRIEND

HE only piece of machinery, complicated in the extreme, that is sold to people who know nothing about machinery is an automobile-and it's a ten to one shot that hardly anyone ever read the guarantee. The main statement in that

part, if the purchaser will send that part back to him, charges prepaid. and if in the manufacturer's judgment it was the manufacturer's fault.

Did you ever buy a machine for your plant on that basis?

What would you say if you got that service from a machine manufacturer or a can factory or anyone else with whom you did business?

Unquestionably, service and guarantees have been too broad to really be fair. Many manufacturers are beginning to find out that there must be a definite line of rights established. The buyer must adjust his conditions to meet the new ideas and contingencies brought about by the new machine, package or whatnot with which he proposes to reduce his cost. He must himself, as well as his subordinates, endeavor to make a success of his new purchase and not put every hindrance in the way of the seller.

Again, it isn't fair to call for help every time any little thing happens. The buyer has his helpers, mechanics and superintendents who should and must be ready to overcome these obstacles unless it is some major affair with which they cannot cope.

If you want service on your car, you pay for it. You don't ever grumble about it!

Why not try to avoid it in your plant and help the merchant who supplies you from having unnecessary expenses or at least pay some part of it? If that line were pursued a lot of things would cost less.

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"NEVER AGAIN"...

says John H. Cartonbyer after blindfold carton test



"They promised me so many nice things for so little money that I took a chance ... P'll have the last laugh on my next order by keeping my eyes open!"

John H. Cartonbyer

Why you can't pick them .. in the dark

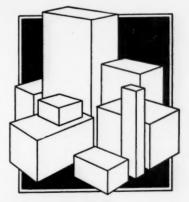
The blindfold test may be okay for selecting one's favorite cigarette but there are too many things that require a buyer to keep his eyes open when good cartons are desired.

See for yourself that the printing is first class... That the carton board is of proper caliper... That cartons are uniform... That good service is possible, not problematical... That they are well packed for shipment... and other like details quite as necessary in the production of your cartons.

How the choice should be made

You no doubt spent a goodly amount of time and money developing and perfecting your product . . . Its manufacture . . . Its distribution . . . Isn't it logical that the same thought and care should apply in selecting a carton that will be consistent with the quality of your goods?

There is no necessity of "going it blind" when you choose as source of supply a firm that is large enough, capable enough and dependable enough to give you the satisfactory carton you want. And the happy part of it is—it costs you no more. Write Sutherland about that next order.



Sutherland
PAPER COMPANY
Kalamazoo, Michigan

Manufacturing Management as Applied to Packaging—VIII

Hope of Low Costs Depends on Effectiveness of Modern Production Practices Whether Automatic or Manual Methods Are Employed—Consideration of Factors Governing Economic Lot Sizes Includes Storage Expenses and Investment Interest

By FRANK C. CHASE

E. R. Squibb & Sons

so frequently heard in discussions of manufacturing procedure. Yet there are many packaging plants representing an endless total volume of business which find themselves confronted with the problem of manufacturing at low costs a variety of finished products. The very nature of the business demands the use of the same equipment as far as possible, and often the same personnel. In other words, the volume of business enjoyed by the individual items does not warrant continued operation with even semiautomatic machinery, even though the total volume may be such as to place the enterprise in an enviable position.

Management desires the lowest possible costs on each item. That is both natural and reasonable. It is up to the manufacturing division to produce at a cost permitting, perhaps, competitive prices and at the same time reasonable profits. Aside from material costs which come within the sphere of purchasing rather than manufacturing, the hope of low manufacturing costs lies in the effectiveness of modern production practices.

Given a quantity of one item which permits uninterrupted output on the equipment provided, low costs are possible so long as attention is given to the several other considerations of management which have been discussed, not only in these articles but in any review of modern manufacturing practices which has, as a background, fairly authoritative ex- manufactured at the lowest cost varies perience. On the other hand, where the output per item is such that no ration costs and inversely as the square automatic machinery is practicable root of the interest charge and storage for the production of the variety of space."

ASS production is the phrase packages by reason of the difference exists a problem which is quite apart from machinery or equipment consideration, becoming rather one of lot size or quantity to be produced at one time or in one run.

> In the first place some disposition should be made of the "bugaboo" of inventory. The efficiency expert, the itinerant industrial engineer and the general text-book discussions of inventory over-emphasize as a rule the importance of small inventory. This may seem rank heresy to modern management theory. Yet it is not, provided we conceive of high inventory as something to be avoided, so long as the tie-up of capital costs more to the enterprise than the manufacturing methods which require a fairly high inventory in order to work themselves out economically, so far as manufacturing costs are concerned. In other words, low inventory is desirable. But it should not be insisted upon for every item of merchandise if the avenues of approach to low inventory are full of the costly practices which decrease materially the operating efficiency of the factory

Alford, in his codification of the Laws of Manufacturing Management, has included the "Law of Economic Lot Size." This law was worked out by Davis, appearing in Manufacturing Industries, April, 1925, p. 353, also August, 1926, p. 129. The law is stated by Alford as follows:

"The quantity of product that can be directly as the square root of the prepa-

In other words, there can be used in size, shape, and material, there for the actual application of the law a formula involving the values incident to manufacture. In order to apply this law certain definite data must be obtained. First, the cost of storage space per unit produced per unit of time, the latter being a division of the total time between replenishment of stock and maximum stock to be produced. There is also the factor of interest on investment which can be obtained by ascertaining the value of the goods produced in terms of material costs and labor spent in changing the raw material into a merchandisable article.

> Another important consideration is the cost of preparing for the "run." This may include cleaning up of the equipment used on different material in preparation for the run of different material. It may include the cost of adjusting the equipment so the packaging can be done on equipment of a multi-purpose type. It invariably must include in such cases the decrease in efficiency due to the change-over since there is no adjustable packaging equipment that can be changed from one size or one type package to another and still turn out uniform output. That is, when such a change is made on adjustable machinery, it always takes several days before the adjustments have been so carefully worked out by the mechanic that the maximum output is experienced. These factors become items of cost consideration, just as surely as the amount of ordinary labor and power required.

THE mathematical law as stated by Davis should be given consideration by any packaging plant oper-

Window Displays That Create Sales

The Sixth of a Series of Talks on Window Displays

there is to play for dealer acceptance.

In the Apollo series the holiday appeal was used for two reasons: first, because it was believed that a large market for candy sales



during the holiday periods existed; and second, because it was known that dealers like to dress their windows in holiday apparel preceding the actual date. Con-

sequently, it seemed that an attractive display with a holiday appeal and atmosphere would kill two birds with one stone. The soundness of these conclu-



crease in sales. The dealers accepted the displays with open arms and gave them space in their windows for unusually long periods. The displays sold candy and justified the dealer's acceptance, the Apollo salesmen's orders increased—everybody reaped the profits of a well-planned campaign including the buying pub-



lic who came to know about these delicious chocolates.

The other element—repetition—is a basic advertising principle. Keeping everlastingly at it is bound to bring results. In this case, however, repetition was achieved without monotony. The same slogan and the same cartouche in the same relative position, the same general shape and appearance, yet each tells a different story, each has a different interest, each is a new display. A "shrewd" buyer said of this series, "but it must have cost a whale of a lot of money." It did, but it brought in a whale of a lot of sales. The proof of the pudding is that this plan is being continued this year.

continued this year.

The W. F. Powers Company,
Creative Color Lithographers, 30
Ferry Street, New York, prepared
and manufactured this series and
the series which is following it

this year.





THERE are two results, beyond the ordinary functions of a Window Display, realized in this Apollo series. The first is dealer acceptance and the second the force of repetition without its monotony.

Every one who has had experience with displays in the retail trade can appreciate the problem of getting the displays in the windows and keeping them there. The most cleverly conceived display in the world will not sell goods unless it "gets up." Installation services and display crews are good ways but expensive. Direct by mail in response to requests and installation by salesmen are used, too, with success in many instances. But the one sure way of getting displays in the windows and keeping them



(Advertisement)

ating on a variety of products requiring frequent change in the adjustment of machinery or the cleaning up and preparation of the available equipment. At the same time, it is not always easy for the packaging superintendent to accumulate sufficiently accurate data to permit himself an exact application of the mathematical law. In such cases resort should be made to a practical consideration of the factors involved which, through ordinary arithmetic, can give indication of the quantity of each item that should be prepared or produced for finished stock at any one time.

In the first place, it is necessary to ascertain through the planning or production department, which should be in close relation to the sales department, the rapidity of sales; not necessarily the sales per month but rather the frequency of ordering. Is it usual for customers to order in quantities assumed to last several weeks so far as retail sales are concerned? Or is it a product that is normally ordered in small quantities, a sort of "hand to mouth" replenishment of stock? If the item is one which is carried in fair stock by the retail stores or by the jobbers, it is less likely that back-orders will result in any great degree, and a smaller minimum can be maintained?

If the product is one which requires great length of time in preparation, testing, packaging or what not, the minimum should be established as one which will permit a reasonable manufacturing period for the product. If, on the other hand, rapid turnover is experienced even though gross sales are fairly respectable, consideration should be given to the provision of means whereby the product can be frequently manufactured, the cost of such frequency be charged into the manufacturing costs, and selling price fixed accordingly if such provision warrants a revision of price.

There is always the problem of adequate service. Sometimes every other consideration has to be cast aside on account of the importance of service for, without the latter, the enterprise will suffer. On the other hand, a careful consideration of less per unit than under the former maximum and minimum of finished quantity of three thousand units per

stock is necessary to insure good run. While this may appear as being service, low manufacturing costs, and of course the consequent increase in

If service can be maintained without immediate filling of orders from stock, or if it provides satisfaction so long as delivery can be made within a few days and the manufacture of the commodity can be swung into economical production on short notice, the problem of "economic lot size" should be considered purely from the standpoint of operating efficiency.

I^N general there are three important factors governing economic lot sizes besides those mentioned of storage costs and interest on invested capital in inventory. These are as follows. First, "set-up;" second, "run;" third, "clean up."

If we were to take a simple problem, yet one which might obtain in any packaging plant, we can get, perhaps, a better idea of what is meant. Suppose, for instance, the time required for setting up the equipment (either manufacturing to bulk or packaging equipment) is ten hours. Suppose that the time required for cleaning up the equipment, not including the time for readjustment or preparation for a run of some other items is ten hours, we have then a total of twenty hours of non-productive labor. If the quantity decided upon as the "run" requires ten hours, we have a total of thirty hours for the manufacture of that particular quantity of finished product. If the quantity were three thousand units, the time with its attendant cost per hour for labor and overhead would be one hour per hundred units produced.

Suppose, on the other hand, that we were to produce thirty thousand units in a run instead of three thousand. It is obvious that with the same efficiency in productive rate, the items of "set-up" and "clean up" become much less a consideration of manufacturing costs. The time would then be one hour per two hundred and fifty units produced. It is obvious that the cost would be much

an unusual situation, since it is unlikely that it would be practical to extend the maximum order quantity from three thousand to thirty thousand, it does serve to illustrate the fact that manufacturing costs can increase or decrease tremendously as the order quantity is decreased or increased. The difference in cost under the various conditions may far exceed the difference due to money tied up in inventory or storage charges. In other words, the bugaboo of inventory dwindles to nothing in some instances and it becomes a matter of nice adjustment of ordering quantity, maximum and minimum, so that efficient manufacturing costs can be maintained consistent with sales demand and turnover.

The mathematical law as quoted by Alford should be given consideration wherever sufficient data can be obtained. Yet in cases where this seems difficult or impossible, it becomes a matter of common sense. The important consideration is that of acquiring sufficient information concerning set-up time, clean-up time and running time (per unit) and from that the drawing of a common sense conclusion as to the amount of the run to be made at one time.

R USSELL FAULKNER, field representative of the Milprint Products Corp. and the Milwaukee Printing Co., reports the opening of a branch office in Denver, Colo., under the direction of the Cosner Sales Co. Other offices established since the first of the year are as follows: St. Louis, Mo., Frank Henderson; Detroit, Mich., J. E. Montgomery; Buffalo, N. Y., E. A. Rodda; Boston, Mass., Frank Crotty; Louisville, Ky., Walter Bonnell; Greensboro, N. C., T. P. Norwood.

L. FERGUSON CO., Joliet, Ill., J • announces the appointment of Joseph J. Trainor to be associated with F. E. Huhn, representing the company in the eastern territory. Mr. Trainor will make his headquarters at 820 South 2nd St., Philadelphia, Pa.



Cleverly Packaged & Attractively Displayed and the sale is half made!

The Container and Cartons pictured above will increase the sales of "BOSTON NOZZLES."

For real advertising value at the point of sale, use Lithographed Folding Boxes and Display Containers.

Write our Idea Department. Their skill and experience is at your service.

Lithographed Folding Boxes, Labels, Display Containers, Cut-outs, Commercial Stationery



BROOKS BANK NOTE CO.

FOLDING BOX DIVISION SPRINGFIELD, MASS.

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Boston

Philadelphia

Portland, Me.



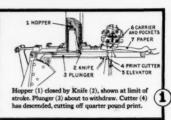


New Butter Printing and Wrapping Machine

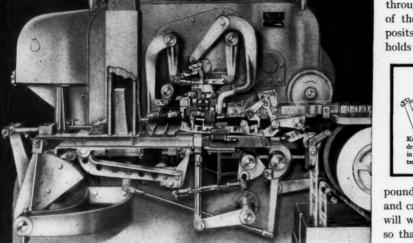
distinct innovation in butter handling machinery is the recently perfected automatic "Quarter" butter printing and wrapping machine manufactured by the Pneumatic Scale Corp., Ltd., Norfolk Downs, Mass.

The present-day demand for smal-

ordinary pound block. This higher cost of production proved a serious handicap to marketing the quarterpound piece. There have been and are machines in the market for wrapping the quarter-pound piece, and other machines for cutting, but to make a complete installation of two types of machines was a necessarily expensive one, oftentimes considerably more than could be profitler units of food products has popu- ably undertaken by the butter mer-



proper size pieces cut from the tub. A knife cleanly cuts off the lower end of this slab of butter. This piece drops into a waiting chamber, the knife is withdrawn and a plunger moves forward carrying the butter through an aperture the exact size of the quarter-pound piece and deposits this piece in a pocket which holds the exact weight of one-quarter

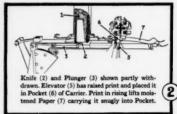


New butter printing and wrapping machine

larized the individual quarter-pound chant whose output might be compiece of butter. The demand for this size and shape has been growing by that fully 80 per cent of the butter is put up in the quarter-pound pieces.

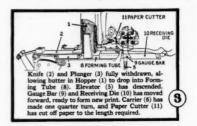
paratively small.

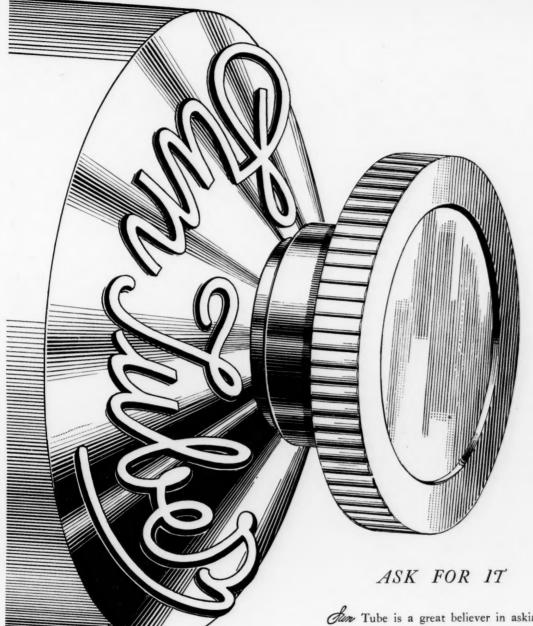
The method of handling the butter leaps and bounds, until it is estimated is new. Ordinarily, in forming the proper size print the butter is forced sold to the householders in the East through a worm by a churning process. This process tends to break It has been generally conceded that down the grain of the butter and the the average cost of cutting and wrap- fatty globules, causing rapid deping a pound of butter into quarter- terioration in butter quality. With pound pieces was two cents over the the Pneumatic "Quarter" machine cost of cutting and wrapping the the butter is fed into a hopper in



pound. This pocket is adjustable and can be enlarged or contracted at will while the machine is in motion, so that no matter what the varying characteristics of the butter placed in the machine, the simple adjustment of this receiving pocket takes care of this variance.

When the proper amount and weight of butter, solid and smooth and with no air pockets, has been





HILLSIDE, N. J.

Gun Tube is a great believer in asking for what they want.

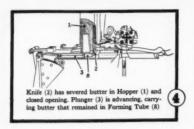
We asked for large quantities and got them.

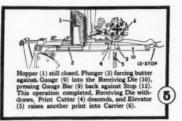
We asked for few sizes and got them.

The fact that we are growing beyond all our dreams indicates the method pays.

President

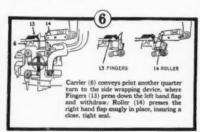
P. S. If you use tubes in quantities, eventually you will be interested in Jun Tubes.

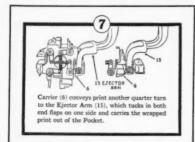




placed in this receiving pocket, it is then ejected onto an elevator which raises the piece into a pocket. Four of these pockets revolve on a Geneva with a stopping station at each quarter circle. At each of these stopping stations one of the wrapping operations is accomplished, and at the last station the finished wrapped piece is ejected onto a waiting carrier belt. Before the quarter piece is elevated into the first pocket, parchment paper drawn from a roll is placed between the piece of butter and the pocket, so that the butter carries the paper into the pocket on its upward movement.

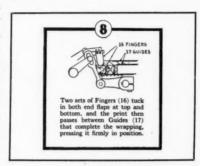
At the second station the proper length of paper is automatically sheared from the roll, then carried around to the other stations for the finishing wrapping operations.





Great care has been taken to build the machine in the most sturdy manner. All of the working parts of the machine are enclosed in a metal shell and the motor is also enclosed. All of the outside parts coming in contact with the butter are made of either wood or monel metal. Enclosing the working parts and the motor enables the operator to hose down the machine with hot water or steam after each day's run, without dismantling the machine.

A study of the accompanying diagrams will indicate clearly the manner in which the machine operates. Installations of these machines are now being made rapidly in various parts of the country.



Improved Bundle Tvers

A N improved line of bundle tying machines has been announced by the National Bundle Tyer Co., Blissfield, Mich. These machines are entirely automatic and operate on



Hopper type tyer so designed that when box or packaged goods are stacked in hopper they are automatically removed and tied at one time

a wide range of sizes. No adjustment is necessary for various sizes or



Bundle tyer for small work where treadle is not needed. This machine will handle packages up to 5 in. in heighth with variable lengths and widths.

shapes of bundles or packages up to the capacity of the machine.

The speed of the machine is only limited by the speed of the operator in passing packages over the platform. As the parcel to be tied is passed over the trip, the machine automatically connects for one operation and then throws out and is ready for the next package. If a package is to be tied two ways, it is passed through the machine twice, turning at right angles for the second operation.

New Counting Machine

THE Durant Manufacturing Co., 655 Buffum St., Milwaukee, Wis., announces the development of a new Productimeter, Model 5DD1, par-



Counting machine for packages

ticularly adapted to vegetable and food packers, light duty conveyors, printing presses and the like.

This new model is said to incorporate some decided improvements in counting machines; special bronze bushings, which insure long wear, require little oil and when worn can be replaced with new bushings at very low cost; a new drive sleeve, designed to prevent racing of the



counter when operated at high speed; exceptionally large drive shaft and pinion shaft; a drop forged operating lever, designed so it can be set at any angle. The counter can be furnished in right or left hand drive, and right or left hand reset, with rotary or reciprocating action.

THE Sisalkraft Co. has announced I that it is now located at enlarged headquarters in the recently completed 23-story Engineering Building, 205 W. Wacker Drive, Chicago, Ill. Officials of the company state that there is a variety of uses for the company's product, "Fibreen," a reinforced, water-proof wrapping paper. Mattress manufacturers, florists, nurseries, book publishers and banks are utilizing this product in increasing volume for wrapping their products and valuable papers, while large quantities are being used by exporters, sheet steel mills, auto, leather and similar industries for protection against moisture, rough handling, and weather. Requests for samples and information reveal that many industries are experimenting with the new material.

Trade Catalogs

IN each issue, under the heading of "Trade Catalogs," will be listed catalogs, trade booklets and similar publications received, together with a brief review and comments on the material contained in them. It is believed that this material, presented in this way, can be conveniently filed on cards for ready reference when required. We will be glad to obtain other catalogs or information relating to equipment or supplies for readers.

Tape Machines: Nashua Package Sealing Co., Inc., Nashua, N. H., describe and illustrate the No. 101 National automatic tape moistening machine in a four-page folder. The machine is designed for moistening gummed paper and cloth tape, cutting it accurately into desired lengths from four inches to forty-five inches and from one inch to four inches in width or two or more rolls with a total width of four inches.

Paste: The Arabol Manufacturing Co., 110 East 42 St., New York City, has issued a folder describing Arabol Library Paste. The product is one that has a place in every business organization where general printing work is done and claims several points of superiority over so-called library pastes.

Paper Box Board: Butterfield-Barry Co., 174 Hudson St., New York City, have issued an attractive portfolio which contains samples of "Royal Satin" box boards. Three groups of stock are shown which can be furnished in varying thicknesses and sizes. The samples shown of one group are mounted with fancy embossed and colored papers and offer pleasing and substantial effects in high grade box board.

Filling Machinery: Stokes & Smith Co., 5004 Summerdale Ave., Philadelphia, Pa., have issued a broadside folder illustrating same with reproductions of actual containers filled by machines made by the company and letters from several customers briefly describing the operations performed and the service rendered by such machines.

Uses of Glue

A hand book recently published by the Glue Research Corp. contains a summary of the information gathered during the investigation of the uses of glue in the paper industry, by the research fellowship of the National Association of Glue Manufacturers at the Bureau of Standards.

The publication contains an outline of paper-making processes in general, information on uses of glue in heater sizing, surface sizing and coating, and a bibliography of publications dealing with these subjects.

Copies may be obtained from the Glue Research Corp., 1457 Broadway, New York, N. Y.

The Story of K. V. P.

INDUSTRIAL history, or the record of achievements as accomplished by manufacturing institutions, is always of interest. And this interest is greatly enhanced when the story is presented in a human and readable CONTING annou Southern Countries.

fashion. Seldom, however, is catalog data and information lifted above the prosaic and usually we find that such material follows standardized forms as to sizes, specifications and so on; little is done to tempt the reader unless he is actually seeking for specific information. In "The Story of K. V. P," presented by the Kalamazoo Vegetable Parchment Co. Kalamazoo, Mich., one finds a most pleasing presentation of readable facts regarding that company, its operations, policies and products. Well illustrated, well printed and complete in every detail, the 72 pages and attractive cover of the book will meet with instant approval by those who are interested in packaging work.

Better Labeling

"BETTER LABELING" is the title of a 32-page illustrated booklet written by Harold C. Pearson and published by the Dewey & Almy Chemical Co., Cambridge, Mass. This book reviews the part which labels play in the merchandising of canned products, the application of adhesives to fibre containers and gives other pertinent information relating to the use of gums, cements and Certain essential requirepastes. ments which the user should seek from a manufacturer of labeling adhesives are stipulated as follows: Control over quality and uniformity of raw materials; adequate manufacturing facilities; control over quality and uniformity of finished products; laboratory resources for experiment, test and development of new products; adequate storage warehouses for raw materials and finished products; staff of thoroughly trained chemical engineers, at home in both the laboratory and the canning fac-An adhesive consumption table which is based on good labeling practice is included.

CONTINENTAL Can Co., Inc., announces the purchase of the Southern Can Co., Baltimore, Md. The new Gibbs Industrial Building in which the Southern Can Co. is located, also passes to Continental ownership.

THE KEDW HOW

Having grown up right in the heart of the great carton industry, it is only natural that Crescent should become a "trail blazer" in the art of designing and making plates for all kinds of packages. As one of the first to utilize the selling appeal of color, we have built up a competent staff of artists, who have had years of experience in this type of work, skillful and ever eager to create beautiful yet practical designs to increase the sales value of the package.

Infinite care is taken by Crescent workmen to make printing plates absolutely accurate, deeply and cleanly etched, and with a perfect color register. For fourteen years we have studied the needs of this specialized industry and have kept pace with the intensive production requirements of modern package making. It will be a pleasure to tell you more about our specialized service.



CRESCENT ENGRAVING COMPANY

SPECIALISTS

Are You Satisfied with Your Plant Production?

If you are not, why not get together?

This is the dull season; let's get ready for fall. We have been doing engineering work for twenty-five years. We have helped hundreds of concerns to cut their costs. We have never made any charge for our services—even though you don't buy a machine.

You cannot confer with better posted, more sincere, or less prejudiced engineers than ours. We will be glad to talk it over with you.

C. S. du Mont, Windsor House, Victoria St., London, England. A. J. Sterling, 225 Broadway, Room 1209, New York, N. Y. E. E. Finch and R. H. Dhonau, Cincinnati, Ohio. Leon & Bonasegna, Calle Lavalle 1521, Buenos Aires, Argentine.

M. C. Finn, 10 High St., Room 322, Boston, Mass. T. C. Kelly, 222 West Adams St., Room 1044, Chicago, Ill. P. Jorgensen, 604 Mission St., San Francisco, Calif. S. Kiefer, Worms, a/Rh., Germany.

Get in touch with these men, or with us direct.



Perhaps it is a conveyor you need.

We have many types and sizes so that we can give you just the right kind for your requirements. We plan and install complete equipments for the handling of all kinds of liquid and semi-liquid products.

The Karl Kiefer Machine Co.

Cincinnati, Ohio

GLUES

DRY OR LIQUID

DRY OR LIQUID PASTES

LABELING SEALING WRAPPING

WESTERN PASTE & GUM CO.

Manufacturers of **DEXTRINES and ADHESIVES**

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JERSEY CITY 402 Claremont Ave.

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AN ELEVATING DISPLAY CARTON

recently developed by

The RICHARDSON COMPANY

The following distinctive features account for its popularity:

- 1. Ease of assembly for packing—made in one piece.
- Simplicity of elevation for display by merchant.
- 3. The display lid is held in a firm, upright position, will not flop or sag.
- 4. Economical construction.
- 5. Adaptable to almost any size or product.

Samples Gladly Furnished in Your Size

THE RICHARDSON COMPANY

Lockland, Cincinnati, O.

MAKERS OF FOLDING CARTONS

Color Printing Headquarters



By courtesy of American Cigar Co.

Colorful





Packages

designed for your individual needs in a way that means selling success.

Folding Roxes - Display Containers Wrappers - Labels

Show Eards - Window Tisplays Hosters

CONSULT OUR TRADE MARK BUREAU

No new brand should be adopted without careful investigation.

We operate a Trade Mark Bureau for the Benefit of our customers. It contains records of over 856,000 brand names including all registered brands.

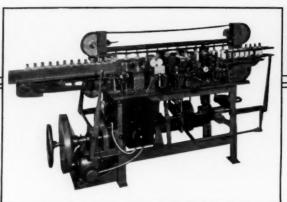
This service is free.

The United States Printing & Lithograph Co.

McDonald Scores Again!



None other for this purpose





Speed and accuracy unequaled

The McDONALD "SPOTTER"

This automatic labeler feels the raised lettering, locates the SPOT and tightly sticks the label on it.

Let us tell you more about it and our other labelers

McDONALD ENGINEERING CORPORATION

220 Varet Street, Brooklyn, N. Y. London: Windsor House, Victoria St., S.W. I.

WEIGHS and PRINTS

the weight for record—AUTOMATICALLY

This device, the "Weightoprint," will give you automatically a printed record of the weight of any part or container as it passes over the scale on a conveyor. It prints the weight on tape, stickers, boxes, labels, tickets —in single or duplicate.

Eliminates Possibility of Errors

All possibility of errors is eliminated, for the "Weightoprint" is automatic. There is no guesswork, no careless readings, no forgetting. You get your report of the weight of each part or lot in individual weights with sub-totals, and grand totals. The record is indisputable.

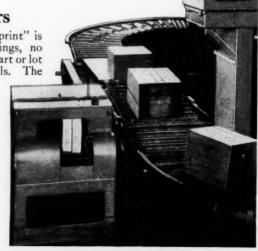
The "Weightoprint" comes in capacities of from three grains to one hundred tons. Can be installed on any conveying system.

Send for Details

Write us today for particulars of this weighing device. See what a remarkable time-saver it is. Stop your weighing losses. Eliminate errors. The "Weightoprint" will do it. Get complete information now. No obligations.

MERRICK SCALE MFG. CO.

Passaic, New Jersey

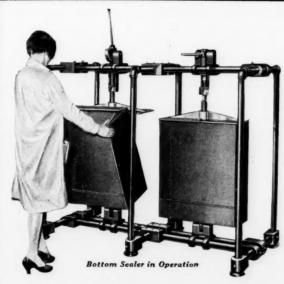


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Containers
that are
STRONG
and
R2 V/ G G E D

ROBERT GAYLORD, INC.

GENERAL OFFICES

SAINT LOUIS



Very rigid and simple in construction, nothing mechanical to get out of order, any boy or girl can operate.

These machines can be built in combinations with one or more bottom sealing units, and with one or more top sealing units as desired.

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THE HARMON SEALER

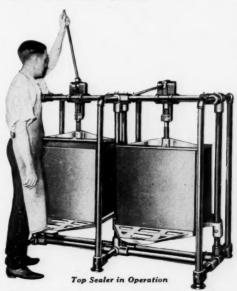
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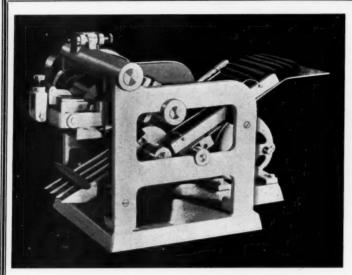
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NOW!

THE HARMON SEALER

Particularly designed for the users of corrugated and fibre shipping containers, with a capacity up to 1500 containers per day.





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AUTOMATIC

SPHERICAL & CYLINDRICAL

Printing Machines

Print on Round Things

Prints direct on Paper Cans, Mailing Tubes, Tin and Glass Containers, Cigars, Play Balls, Twine, Fruits and Nuts such as Oranges, Grapefruit, Apples, etc.

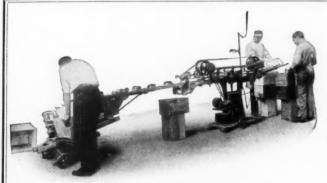
Place your trade-mark where it will do the most good—on the article itself. Let us tell you how these machines can be adaptable to your particular needs.

F. J. SÉVIGNÉ MACHINE CO.

Automatic Printing and Wrapping Machines

F. J. SÉVIGNÉ, Pres.-Treas.

NASHUA, NEW HAMPSHIRE



Let This Outfit Put Your Labeling Room on the Proper Cost Basis

The Burt Labeling and Casing Machines

Have revolutionized hundreds of labeling departments because of their speedy, efficient way of sending goods to the shipping room.

They eliminate the congestion, usually a part of hand work, and do a neat, tight job. You need but see the BURT MACHINES at work to recognize how indispensable they are to the average plant.

Probably there is a Burt Outfit near you to inspect—just drop us a line, stating size of cans used.

BURT MACHINE COMPANY

New York Office 225 Broadway Main Office and Plant BALTIMORE, MD.

Chicago Office 564 W. Randolph St.

Insure Against

OVERWEIGHT

..... Overweight losses are usually far greater than burglary losses ever COULD be



F course you carry burglary insurance but why not insure against the BIG thief of business —overweight?

Overweight losses are continuous losses. Quarter ounces may LOOK small, but figured over your year's production they may mean a staggering drain on your business.

If you are now depending upon ordinary scales in your packing departments you are losing a good share of the profit, which is rightfully yours. Why not install EXACT WEIGHT SCALES? They ELIMINATE overweight. They never require leveling. They are never affected by the moisture or consistency of the product to be weighed.

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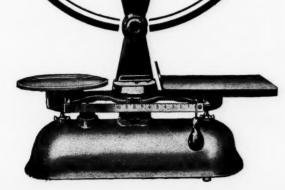
THE EXACT WEIGHT SCALE CO.

(Formerly the Smith Scale Co.)

1308 W. Spring St. Columbus, Ohio







How to increase sales through installment selling

"Installment Sales and Collections"

By Bryant W. Griffin

—offers successful methods of increasing business through the installment method. It deals with every type of installment business from automobiles to musical instruments.

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Established 1897

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Machines—Redington Counting Machines
110-112 South Sangamon Street
CHICAGO, U. S. A. M-P

Sealing and Labeling

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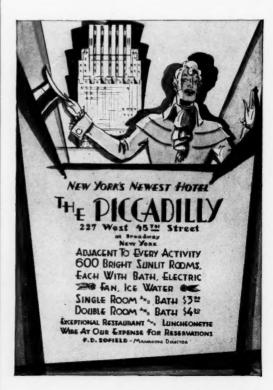
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Prices and Samples gladly furnished

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FIBRE CANS of Every Description

Here is one place where you can get a quality product, plus real service, at the same cost you would expend on a mediocre product.

We manufacture fibre cans—square, round, oblong, with tin tops and bottoms and also complete with labels.

Leaders in industry use our cans exclusively. May we quote you on your requirements?

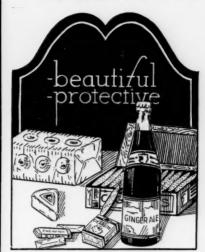
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121 CHAMBERS ST. ST. LOUIS, MO.

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FOR BEAUTY and UTILITY



Cheese

Butter

Ice Cream

Tea

Chewing Gum

Candy

Cigars

Cigarettes

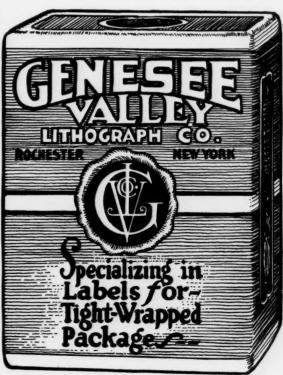
Beverages

Friction Tape

Midland Metal Co.

1249-1289 SO. CAMPBELL AVE. CHICAGO, ILL.





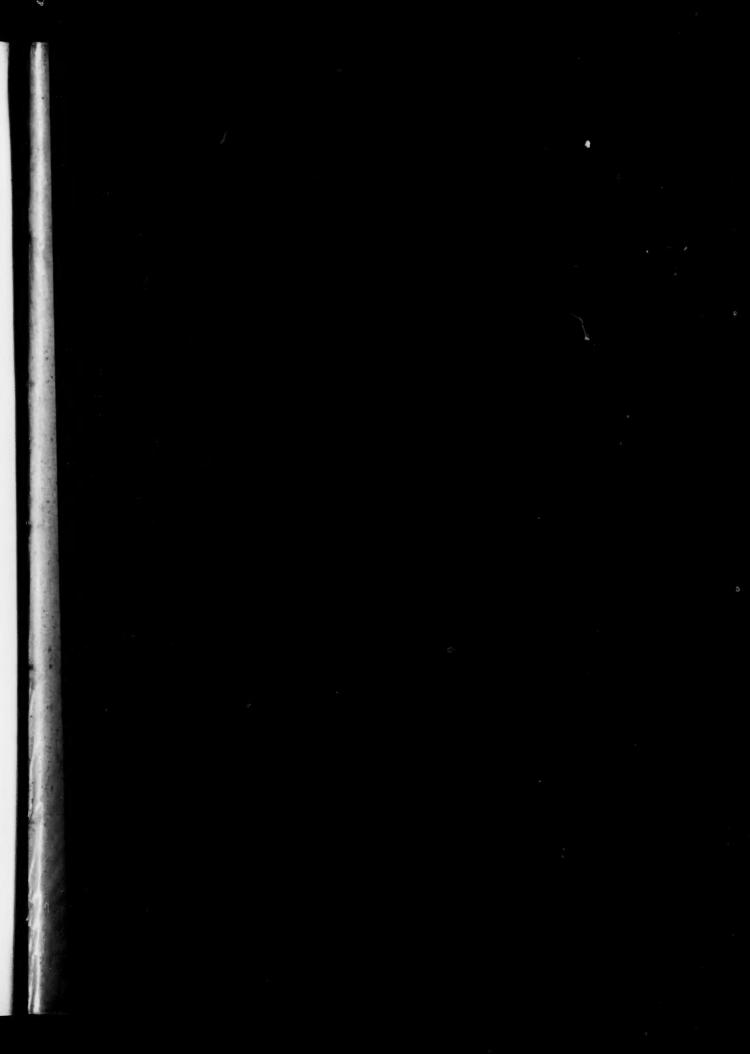
THE RANDOLPH BOX and LABEL CO. CHICAGO



Manufacturers of FOLDING BOXES DISPLAY CONTAINERS LABELS and WRAPPERS

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Package



Moisture dries up in despair in the face of this new wax wrapped package. The entire package of Sunshine Soda Crackers is now enclosed in an outside waxed wrapper.

There are also two sturdy guards against moisture inside—the wax paper around the biscuits, and the waxed cardboard carton.

This triple protection insures oven-crispness from the Sunshine ovens to your table.



LOOSE WILES BISCUIT CO.

Clipped from N. Y. Daily Paper

This is the way one of our customers takes advantage of the advertising value in a wrapper of WAXED GLASSINE.

A Moisture-proof, Grease-proof and Transparent wrapper is a decided sales help.

"Oven-fresh on the Consumers Table" is made possible by a wrapper of Riegel's Waxed Glassine.

RIECELY ** Made by

The WARREN MANUFACTURING CO.
342 Madison Avenue, New York, N. Y.

Chicago Office: 1912 Conway Bldg.

THESE HOOD RED-MEN

are on display all over the United States and foreign countries. Wherever displayed they help sell Hood tires.

The individuals forming the Munro & Harford organization are trained in the creation and production of Direct Advertising. Their efforts are co-ordinated to give you the best in plan, copy, design and workmanship.

Either write or 'phone us when you contemplate your next display piece. We will design something original and worthwhile for you.

Our products include:

Window Displays
Package Inserts
Counter Cards
Broadsides
Car Cards
Calendars
Cut-Outs
Blotters
Booklets
Folders
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